Digitized by the Internet Archive in 2023 with funding from University of Toronto













SANAPIANS SOCIATIONS

Features

Immigrants working in a non-official language Profile Impacts

2006 Census First Nations people Métis

Active leisure

Benetits trom travel

\$24 Canada • Catalogue no.11-008 Summer 2009 • No. 87



Canadä

How to REACHUS

Editorial Office

E-mail: cstsc@statcan.gc.ca

Fax: 613-951-0387 Write: Editor-in-Chief,

> Canadian Social Trends Statistics Canada

7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

For service to subscribers

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Write: Statistics Canada, Finance, 6-H R.H. Coats Building

150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

How to order Statistics Canada publications

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Online: http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE

Need more information about Statistics Canada products?

E-mail: infostats@statcan.gc.ca

Phone: 1-800-263-1136
Online: www.statcan.gc.ca
TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Summer 2009 No. 87



Editor-in-Chief Margaret Michalowski

Senior English Editor Karen Watson

Senior French Editor Marie-Paule Robert

Production Manager and Art Direction

Monique Poirier

Creative ServicesCarol Noël, Jennifer Pfitzer

Publishing Specialists Lyne Bélanger, Chantal Chalifoux

Marketing

Associate Editors

Warren Clark, Susan Crompton, Matt Hurst, Leslie-Anne Keown, Ian Quinn, Derrick Thomas, Martin Turcotte, Mireille Vézina

Review Committee

Jane Badets, Rosemary Bender, Geoff Bowlby, Yvan Clermont, Louise Marmen, Karen Mihorean, Gillian Oderkirk, Georgia Roberts, Grant Schellenberg, Pamela White

Canadian Social Trends

June 2009

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2009

All rights reserved. This product cannot be reproduced and/or transmitted to any person or organization outside of the licensee's organization. Reasonable rights of use of the content of this product are granted solely for personal, corporate or public policy research, or for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from this product. These materials are solely for non-commercial purposes. In such cases, the source of the data must be acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, users shall seek prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Indexed in the Academic ASAP, Academic Search Elite, Canadian Periodical Index, Canadian Serials, Expanded Academic ASAP, PAIS International, Periodical Abstracts, Periodical Abstracts Research II, ProQuest 5000, Proquest Research Library and available on-line in the Canadian Business and Current Affairs Database.

ISSN 0831-5698 (Print) ISSN 1481-1634 (Electronic)

SANAPIAN SOCIAL TENSE

Features



- 2 Immigrants in Canada who work in a language other than English or French by Derrick Thomas
- 12 The impact of working in a non-official language on the occupations and earnings of immigrants in Canada by Derrick Thomas
- 22 Métis in Canada: Selected Findings of the 2006 Census

 by Linda Gionet
- 27 Who participates in active leisure?

 by Matt Hurst
- 34 Life in metropolitan areas
 Are suburban residents really less
 physically active?

 by Martin Turcotte
- 44 Going on vacation: Benefits sought from pleasure travel

by Susan Crompton with Leslie-Anne Keown

54 First Nations people: Selected findings of the 2006 Census

by Linda Gionet

Immigrants in Canada who work in a language other than English or French

by Derrick Thomas

inguistic diversity has long been a feature of Canada's work force. English, French and Aboriginal languages have served and still serve as languages of commerce and work in various regions of the country. The linguistic mix has been enriched by immigrants from a large number of other countries.

Immigrants make up a growing share of Canada's population and labour force. There were over 3.8 million immigrants in the experienced labour force in the 2006 Census, an increase of about half a million over the number in 2001. Increasingly, immigrants come from source countries where English and French are not commonly spoken. Consequently, a larger proportion of Canadian workers now use a language other than English or French in their job. For the purpose of this article, "official languages" refers to English and French.²

At the time of the 2006 Census, close to 831,000 people in Canada's labour force used a language other than English or French on a regular basis in their job. This constitutes close to 1 in 20 (4.5%) people who had been employed between January 1, 2005 and May 16, 2006.

While still a small proportion nationally, it represents an increase both absolutely (86,900) and proportionately (from 4.41% to 4.54%) over the 2001 Census. Moreover, the proportion using a language other than English or French at work is much higher in some provinces and major cities than in other parts of the country.

In 2006, 611,400 of workers using non-official languages were immigrants. Over 70% of these immigrants were already Canadian citizens.

This article will use data collected in the 2001 and 2006 censuses of Canada to describe immigrants who used a language other than one of Canada's official languages in their work. It will explore the extent to which they rely on non-official languages at work in conjunction with: their official language ability, their age at immigration, their level of education and their place of work in Canada. It will look at which languages immigrants actually use in their jobs. The article also examines whether immigrants are more likely to use non-official languages at work within their language communities.

English and French remain the dominant languages in Canada's workplaces and markets. There are, however, establishments, networks, markets and neighbourhoods where workers can function and sometimes thrive in another language.³ These linguistically-delimited communities or markets (sometimes referred to as enclaves⁴) depend on a concentration of people who share not only a language but often an ethnic background, common experience and similar tastes.

Some researchers report that workers in such communities face limited opportunities and are rewarded less well for their skills.⁵ Ethnic community based economies, however, can provide opportunities for newcomers to earn a living despite the inability to communicate fluently in the dominant language. Owing to a concentration of consumers and workers, such communities can also more easily and cheaply produce and distribute goods and services valued uniquely by ethnic groups.6 Businesses positioned to do so can avail themselves of both the skills and markets represented by immigrants in their community.

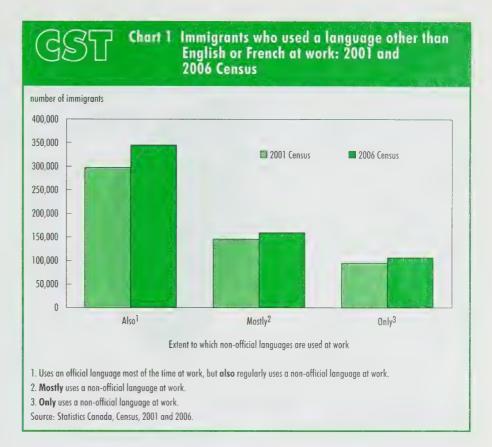
While different languages and cultures can disrupt the flow of information and exchanges between these communities and the wider marketplace, these barriers are not impermeable. Ethnic products frequently find a wider market, and enclave labour can be vital to the functioning of at least some sectors of the general economy.7

Non-official languages are becoming more prevalent in Canadian workplaces

Immigrants who work in Canada can be distinguished according to the extent to which they use non-official languages in their jobs. Jobs differ in the amount of communication they require, but the proportion of communication that takes place in a non-official language can be used to construct a scale. This scale can be used to study and compare immigrants who use a non-official language in their job at different censuses (Chart 1) and across other characteristics.

At one end of the scale are those immigrant workers who "only" use non-official languages; then, those who "mostly" use non-official languages but who also use an official language with some regularity; next are those who mostly use an official language but who "also" regularly use a non-official language; and on the other end are those who "do not" use a non-official language at work with any regularity.

Since the mid-1990s, more immigrants have been selected on labour market criteria that include official language skills. Thus a slightly larger share of Canada's immigrants is arriving with the ability to speak English or French.⁸ The proportion of immigrants who work in a nonofficial language declined very slightly between 2001 and 2006 (16.3% vs 16.0%).9 Nonetheless, according to 2006 Census data, immigrants are 10 times more likely than their Canadian-born counterparts to work in a non-official language (16% versus 1.5%).



For the past 15 years, Canada has had historically high levels of immigration. As a consequence, immigrants make up an increasing proportion of the labour force. They accounted for more than one-third of labour force growth between 2001 and 2006 and now constitute over 20% of those who work in Canada. As a result, the total number and share of workers in Canada using a non-official language at work has increased.

The number of immigrants working in Canada in a non-official language grew from 538,000 in 2001 to 611,400 in 2006. This represents an increase of 73,400 people or almost 14%.

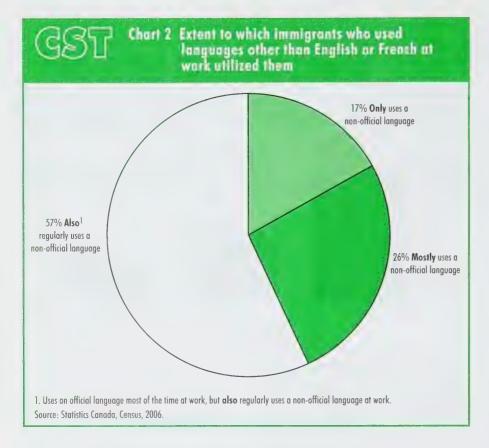
Most immigrants who use a language other than English or French at work use it in conjunction with one of these official languages (Chart 2). In fact, more than eight in ten (83%) use English or French regularly at work along with a non-official language. About one in six immigrants use a non-official language "only" (17%).

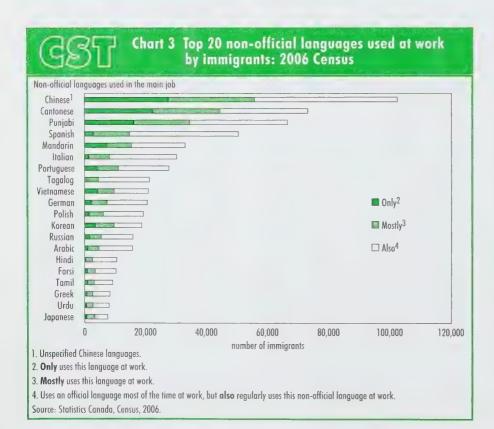
Asian languages predominate

Immigrants use a variety of nonofficial languages at work. East Asian and particularly Chinese languages figure predominantly among them (Chart 3). Over 208,000 immigrants regularly work in Cantonese, Mandarin or an unspecified Chinese language. 10 Punjabi, Tagalog, Korean and Vietnamese are also often used on the job. It is, moreover, those who use these Asian languages who are most likely to use "only" a nonofficial language at work. Immigrants from Asia tend to have arrived more recently than Europeans. Spanish, Italian, Portuguese, German, Polish and Russian are also often used at work but more often along with English or French.

Official language ability affects the language of work

With the shift to a knowledge-based economy, official language skills are even more important in the labour market than in the past. 11 Compared with other immigrants, immigrants





unable to speak at least one of the official languages more often work in some other language (80% in 2006). Almost 60% of those who used "only" a non-official language at work indicated that they were unable to conduct a conversation in English or French. This suggests that some immigrants who work in nonofficial languages may do so because they face barriers owing to limited official language skills. Their lack of official language skills could restrict to a certain extent their mobility, bargaining position and terms of employment.

It should be noted that non-participation and unemployment rates are higher for immigrants who do not speak English or French. Many will not have worked in 2005 or 2006. As a consequence, they were not asked about their language at work and are not included in this analysis.

About 6% of those who "mostly" or "also" used a non-official language at work indicated they were unable to speak an official language. This implies that they used an official language only in a limited, work-related context.

There is undoubtedly some variation in official language skills beyond the self-reported ability to conduct a conversation. Fluency, literacy and accent all have an influence on employment. ¹³ The language of work may well capture more of this variation in ability. It might reflect the assessment of employers and the markets as to the actual oral and written language skills of immigrants.

Immigrants who arrive when older more often rely on a non-official language

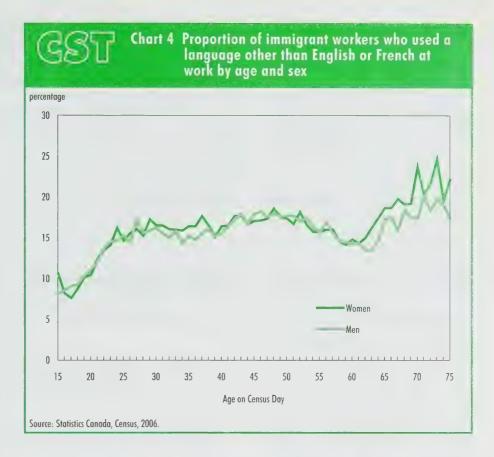
There are few differences with respect to gender, but in general, older immigrants are more likely to use a language other than English or French at work (Chart 4). The proportion that uses non-official languages increases with age, but not in a constant fashion.

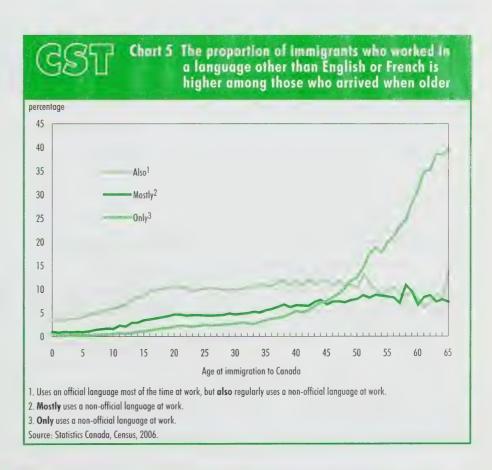
Non-official language use at work was relatively low among youth who held jobs. It was higher but essentially stable over the working ages 25 to 54. It decreased for those 55 to 65. Immigrants over 65 who worked, however, were significantly more likely to use non-official languages in their jobs. The average age of immigrant workers in Canada was about 43 in 2006. For those who used a non-official language with any regularity, it was 44 years of age. For those who used only a non-official language it was higher at 47.

The age effect can be attributed largely to immigrants who arrive when older as opposed to immigrants who have aged in Canada. Immigrants who arrive at more advanced ages are more likely to work in a minority language and are particularly likely to use one to the exclusion of the official languages (Chart 5). Immigrants who used only a non-official language at work arrived in Canada at an average of 36 years of age. Those who did not regularly use one arrived at an average age of 23.

One possible explanation for the association between age at immigration and the use of a non-official language at work may lie in Canada's evolving immigration policy and the various criteria for admission to this country. An increasing portion of the immigrants accepted in Canada each year is screened on labour market criteria.¹⁴

The selection criteria include age along with official language ability, work experience and education. Preference is given to those of prime working age. Many persons, however, continue to be admitted to Canada for family and refugee protection reasons. Older immigrants are more often accepted for these reasons, are not subject to official language or other labour market tests, and are thus more likely to lack official language skills. To the extent that they work to earn a living or to build up pension credits, older immigrants are thus more likely to take jobs not requiring English or French.





Use of languages other than English or French at work declines with time in Canada

Immigrants' use of non-official languages at work appears to lessen as they are in Canada longer (Chart 6). The drop is fastest among those who use non-official languages "only"—the proportion seems to fall by over one-quarter in 2 years.

A slower decrease is observed among those who "mostly" use non-official languages. The proportion of immigrants that "also" uses a non-official language along with English or French seems to remain stable for a considerable time before also falling off. This group may be replenished by movement out of the groups who use "mostly" or "only" a non-official language. Immigrants may make more use of official languages at work as their facility with them improves.

The official languages skills of immigrants improve with time in Canada but the proportion of immigrants who arrive with official language abilities also differs

over time. In recent years a larger proportion of immigrants have been selected on labour market criteria that include knowledge of an official language. The broad pattern has been one of improved skills in English and French among newcomers who enter each year. 15

It seems that almost one-quarter of working immigrants initially use languages other than English or French in their jobs. This proportion appears to fall off as they adjust to Canadian labour markets. However, as many as 1 in 10 still regularly use non-official languages at work after as much as 40 years in Canada. Almost all of them, however, also use one of the official languages regularly in their job.

Immigrants with less formal schooling more often work in a language other than English or French

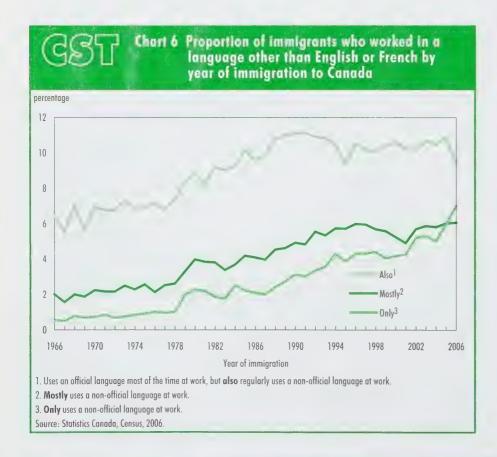
In general, immigrants who use a nonofficial language at work (in the "also," "mostly," and "only" categories) tend to have less formal education than those who do not (Chart 7). Almost half of these immigrants who use nonofficial languages at work had a high school diploma or less, compared to about one-third who use only official languages. Over 1 in 5 had no certificate, diploma or degree. This was the case for only about 1 in 10 of those who worked in English and/or French and did not regularly use any other language. Three-quarters of those who used "only" a non-official language had a high school education or less.

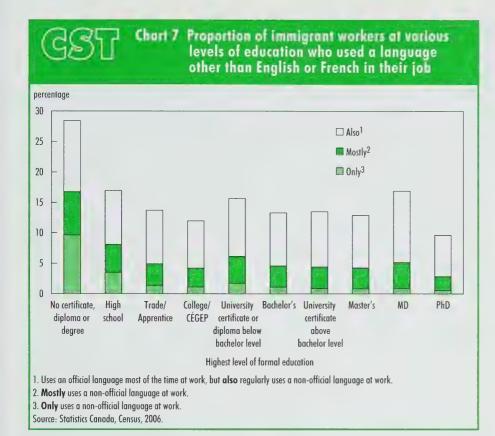
About 28% of immigrant workers with no certificate, diploma or degree used a language other than English or French at work. The proportion was about 17% for those with only a high school education. It was lower still among the holders of trade and college certificates.

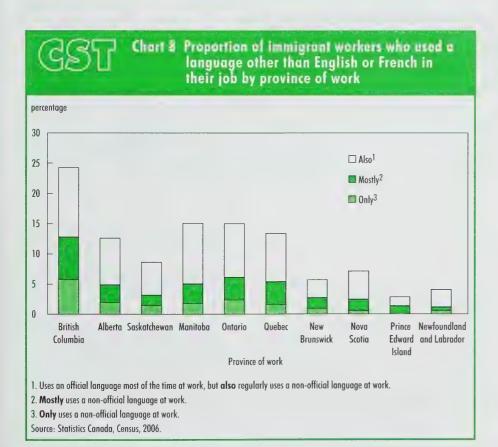
Beyond that level of education, however, the story is more complex. There were a number of immigrant workers educated at the university level who regularly worked in a language other than English or French. There are also a number of immigrants who hold medical doctorates who regularly use a nonofficial language at work. However, few of these highly-educated workers use a non-official language to the exclusion of official languages. Perhaps some are professionals who are sought out by their communities owing to their skills in a non-official language.

Non-official languages used at work in big provinces and cities

The immigrant population in general is concentrated in Canada's largest provinces and cities. Newcomers who work in non-official languages are even more densely concentrated. ¹⁶ In 2006, Ontario had nearly 315,000 immigrant workers who used non-official languages in their job; British Columbia had almost 164,000; Quebec had 66,000; and Alberta had 45,000. Among the provinces, British Columbia had the highest proportion (almost 25%) of immigrant workers







who regularly used other languages at work. Ontario and Manitoba both had about 15%, Quebec had over 13% and Alberta had 12%. In general, non-official languages were used less often in Atlantic Canada (Chart 8).

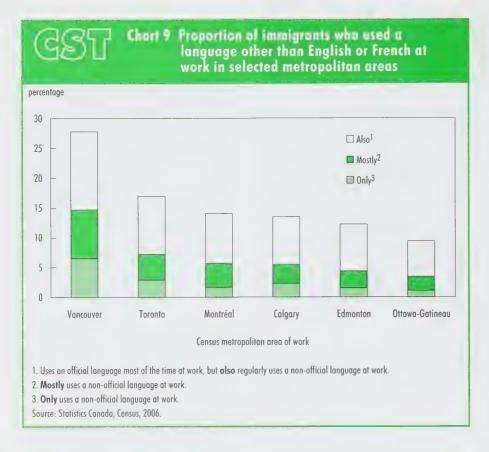
On the whole, non-official languages are more likely to be used at work in larger urban areas (Chart 9). About 10% of immigrants in rural areas use a language other than English or French at work, while 16.4% of those in urban areas do. Over 95% of immigrants who used a non-official language in their job worked in an urban area. Three major cites: Toronto, Vancouver and Montréal accounted for over 75% of them.

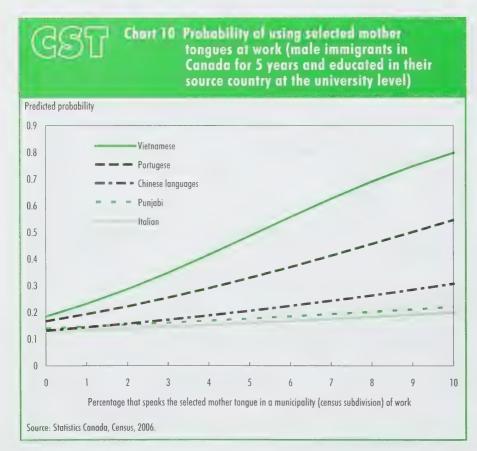
Immigrants more likely to use non-official languages within their language communities

Immigrants who have a non-official mother tongue¹⁷ are far more likely to use a non-official language at work. Holding other factors constant, the likelihood that a given immigrant will use their non-official mother tongue at work increases with the proportion of people who speak that language in the municipality where they are employed.

Language groups differ in how sensitive they are to the presence of people who speak their mother tongue in the area where they work. The top language groups (Chart 3) were tested and a significant positive relationship was found in most cases. For example, among immigrants who have a Chinese mother tongue, 19 the probability of working in that language doubles as the proportion of Chinese speakers in the municipality where they work increases to 10% (Chart 10). 20

Using a non-official language at work depends in part on the presence of enough customers, employers and co-workers who speak the same language. It helps if there is a market where information is exchanged in that language.





Summary

As immigrants from non-English and non-French speaking countries have made up an increasing proportion of the labour force, the use of other languages in Canada's workplaces has increased.

A significant proportion of immigrant workers regularly use languages other than official languages in their jobs, especially in some provinces and major cities. Those who do so, often but not always lack official language skills. They also more often have a mother tongue other than English or French. Moreover, immigrants who work in other languages tend to have arrived in Canada at a more advanced age and to have lower levels of education than those who do not. Those who come from East Asia are most likely to use a language other than English or French at work. The vast majority work in Canada's major cities.

The probability that a given immigrant will use their mother tongue in their job increases with the proportion of people who speak that language in the community where they work. There could be areas within Canadian cities where there are enough customers and employers who speak specific non-official languages to allow immigrants to earn a living in their native language.



Derrick Thomas is a senior analyst with Social and Aboriginal Statistics Division, Statistics Canada.

- The experienced labour force consists of those workers who held a job on Census Day along with people who had been employed at some point between January 1, 2005 and May 16, 2006.
- In some of Canada's territories, Aboriginal languages have official status. This paper focuses on immigrants and very few immigrants use Aboriginal languages.
- Wilson, K. and Portes, A. (1980). Immigrant enclaves: An analysis of the labour market experiences of Cubans in Miami. American Journal of Sociology, 86, 295-319

GST What you should know about this study

This article is based primarily on data collected using the 2B form (long form) in the 2006 Census of Canada. It also makes use of some of the same information collected in the 2001 Census. One out of every five households in Canada receives the longer 2B form.

For each person aged 15 or over who is working or who has worked for pay or in self-employment over the current or immediately preceding calendar year, the census long form poses two questions. The questions are asked with reference to their current job, the job at which they worked the most hours (if they had more than one) or the job of longest duration if they are not working on Census Day. They are: (a) In this job, what language did this person use most often? and (b) Did this person use any other languages on a regular basis in this job? Respondents were able to check-off English or French or to specify another language.

Only immigrants are included in the analysis. All persons who answer the "language at work" question in the census have, by definition, been employed at some point in the recent past. Approximately 50,000 immigrants who lived in Canada in 2006 worked outside Canada. In 2001 about 46,000 did so. These immigrants reported in the census about jobs they held in another country. Some of them may have described a job they held before migrating, but in 2006 over three-fifths of them were providing information about a job they held on Census Day. These foreign job holders span many occupations and countries of origin. Engineers and computer consultants figure prominently among them, as do truck drivers and pilots. Many were born in China, the

U.S., India or the UK. About half at each census said they worked in a non-official language. Because they work in a non-Canadian environment, these immigrants have been excluded from the analysis in this article.

Most of the reported numbers and proportions are from simple cross-tabulations. But, to check for spurious associations, a model is used to estimate the probability that an immigrant will regularly use a language other than English or French at work. This allows other factors to be held constant (including: gender, marital status, education level, location of study, official language ability, mother tongue, place of birth, time in Canada, age at immigration, and population in the census subdivision where they work). Similar models are used to estimate the probability that immigrants from a number of mother tongue groups will use a non-official language at work, conditional on the same set of characteristics along with the proportion of persons in their municipality (CSD) who speak the same language. Since language at work is measured at the categorical level, logistic regression was used.

The results of these models are reported as predicted probabilities. These probabilities are calculated for the characteristic under discussion, where that characteristic varies but all other variables are held constant at their average or most common value.

All the relationships discussed in the paper are significant at the .05 level and the tests of significance rely on weights which have been normalized to have a mean of one.

Sanders, J. M. and Nee, V. (1987). Limits of ethnic solidarity in the enclave economy. American Sociological Review, 52(6), 745-767.

Portes, A. and Jensen, L. (1987). What's an ethnic enclave? The case for conceptual clarity. *American Sociological Review*, 52(6), 768-773.

4. Since the seminal article by Wilson and Portes in 1980, which described the experiences of Cubans in Miami, such communities or segmented markets have been referred to in the academic literature as enclaves.

- 5. Sanders, J. M. and Nee, V. (1987). Limits of ethnic solidarity in the enclave economy. American Sociological Review, 52(6), 745-767.
 - Hou, F. and Picot, G. (2002). Visible-minority neighbourhood enclaves and labour market outcomes of immigrants. In C. M. Beach, A.G. Green, and J. G. Reitz (Eds.), Canadian Immigration Policy for the 21st Century (pp. 537-569). Kingston: John Deutsh Institute, McGill-Queen's University Press.
- Chiswick, B. R. and Miller, P. (2002). Immigrants' earnings: language skills, linguistic concentration and the business cycle. *Journal of Population Economics*, 15, 31-57.

- 7. Portes and Jensen. (1987).
- 8. Citizenship and Immigration Canada. (2007). Facts and Figures 2006, Immigration Overview: Permanent and Temporary Residents. Ottawa: Minister of Public Works and Government Services Canada.
- Statistics Canada. (2008). Using Languages at Work in Canada, 2006 Census. Statistics Canada, Catalogue no. 97-555. Ottawa: Minister of Industry.
- 10. Some census respondents distinguish between Cantonese and Mandarin while others who may use these languages simply report "Chinese." Written Chinese, moreover, is not divided in the same way as is spoken Chinese.

- Keung, N. (2008, November 1). 'English or bust' is new reality for immigrants; Knowledge economy drives language needs. Toronto Star, p. A13.
- 12. This would seem to imply that some immigrants who use non-official languages also use an official language without, in their own estimation, really being able to speak one. However, the census question on official language ability asks about the ability to "conduct a conversation" while the question on "language of work" asks only about the language "used." One might infer that immigrants who cannot conduct a conversation in an official language use one only in a limited work related context.
- Chiswick, B. R. (1991). Speaking, reading, and earnings among low-skilled immigrants. *Journal of Labour Economics*, 9(2), 149-170.

- 14. Citizenship and Immigration Canada. (2007).
- 15. Citizenship and Immigration Canada. (2007).
- 16. The locations are the census subdivisions (CSD's) or municipalities where immigrants work. Many workers indicated in the Census that they had no fixed place of work (e.g. truck drivers, construction tradespersons, house cleaners, traveling sales persons, etc.). In those cases the CSD of work has been imputed from the CSD of residence.
- 17. According to the 2006 Census Dictionary: Mother tongue refers to the first language learned at home in childhood and still understood by the individual at the time of the census.
- 18. Reitz, J. (1990). Ethnic concentrations in labour markets and their implications for ethnic inequality. In R. Breton, W. W. Isajiw, W. E. Kalbach, J. G. Reitz (Eds.), Ethnic Identity and Equality: Varieties of Experiences in a Canadian City (pp. 135-195). Toronto: University of Toronto Press.
- 19. Refers to any Chinese language.
- 20. The predicted probabilities are for male immigrants who arrived at 24 years of age, have been in Canada for 5 years, are married, speak an official language, and whose highest level of education attained is a university degree from their world area of origin.

Looking for health information online?

Link up with Statistics Canada's Guide to Health Statistics!



The Guide to Health Statistics is a series of **online links** that lead you to health information published by Statistics Canada.

Let <u>www.statcan.gc.ca</u>'s *Guide to Health Statistics* be your passage to the world of health information. In the *Guide* you'll discover links to:

- ⇒ vital statistics
- ⇒ cancer statistics
- ⇒ health determinants
- ⇒ health status
- ⇒ health care issues
- ⇒ and much more...

Find the information you need now. Link up to a great number of online products, documents and surveys like the National Population Health Survey. The *Guide to Health Statistics* allows you to search and locate exactly what you're looking for.

Save time. A few clicks and you'll be connected to health information from www.statcan.gc.ca, your source for health facts and analysis.

Access anywhere, anytime. You get current detailed information quickly and efficiently thanks to continuous updates, regardless of location and time constraints.

Put the data to work.

Copy text from online right into your documents and databases.

Expertise you can trust! You can count on relevant, dependable information with a unique focus on Canada-wide indicators from Statistics Canada. So, when you're on the lookout for firstrate health facts and analysis, allow the Guide to Health Statistics to be your bridge to health information.

It's easy! Visit our site at www.statcan.gc.ca.









Here are some of the handy links you'll find in the Guide to Health Statistics

Links to insightful analysis and data on:

⇒ Cancer

Health Surveys

- ⇒ Canadian Community Health Survey (CCHS)
- ⇒ National Population Health Survey (NPHS)
- ⇒ Smoking and Tobacco Use Surveys
- ⇒ Health Care Survey

Sample links to related sites:

- ⇒ Canadian Cancer Statistics
- ⇒ Canadian Institute for Health Information (CIHI)
- ⇒ Health Canada
- ⇒ Canadian Health Network

Health information? We've got connections!

The impact of working in a non-official language on the occupations and earnings of immigrants in Canada

by Derrick Thomas

he importance of language in the labour market and general integration of immigrants is widely agreed upon. Immigrants must often adjust to societies with cultures and languages that differ from their experience.

The languages of the larger established population in the areas where migrants settle tend to be the ones used in markets and in most workplaces. In addition, Canada also has Official Languages legislation. Various Federal and Provincial Acts formally establish laws for language use, for instance: that people seeking government services will be served in the official language of their choice; that publicly-funded schooling will be available in an official language; or that official languages are the language(s) of work in a given institution or area.

For the purposes of this article, "official languages" refers to English and French.² The term "non-official language" refers to a language other than English or French.

Many studies in Canada have used census data to examine the impact of official language ability on the economic integration of immigrants.³ Until 2001, the census only provided data on the self-reported ability to

conduct a conversation in an official language. Language ability is more complex, however, than it initially appears.

There are various levels of language knowledge from basic survival ability to complete fluency. The ability to understand, speak, read and write can, moreover, be distinguished. Official language literacy is lower among immigrants, even when those unable to speak English or French are taken out of the equation.⁴ Accented speech can also exert an influence. 5 Immigrants may well be at a disadvantage for some time even after they report that they can conduct a conversation in the language of the predominant marketplace.

Another measure now exists that can complement data on the self-assessed ability to conduct a conversation in English or French. Since 2001, the Canadian census⁶ has also asked about languages of work (See "What you should know about this study"). This article explores the utility of this new measure as a predictor of economic adjustment among immigrants, as compared to and in conjunction with self-reported official language ability. Language of work reflects to a certain extent the

assessment of the marketplace with respect to workers' official language capacity and literacy. As such, it adds to our ability to explain employment, occupation and earnings.

Immigrants make up a growing share of Canada's population and labour force. There were over 3.8 million immigrants in the experienced labour force in the 2006 Census,⁷ an increase of about one half million over the number in 2001. The use of non-official languages is increasing in Canada's workplaces and markets. The number of immigrants working in Canada in a non-official language grew from 538,000 in 2001 to 611,400 in 2006. This represents an increase of 73,400 people or almost 14%.

This article looks at a number of issues. One question concerns the extent to which immigrants who work in a non-official language do so because they derive an advantage through access to additional markets. Alternatively, some immigrants may work in a non-official language because poor official language skills limit their choices and confine them to less rewarding jobs. Perhaps work in a linguistically-delimited market segment (enclave^{8,9}) can be an important stepping stone where

some immigrants earn a living while they adjust to life in Canada. This article will discuss these issues using data on language of work from the 2006 Census. The focus will be on immigrants in the experienced labour force.

Labour force participation and employment differ according to the language at work

Immigrants who cannot conduct a conversation in English or French are more likely to be unemployed or not in the labour market. Those who held no job in 2005 or in 2006 were not asked about their language at work in the 2006 Census and hence are not part of this analysis. Unemployment and participation rates can be calculated for those who held a job at some point. Those rates, however, underestimate the extent of nonparticipation and unemployment among those unable to converse in an official language.

Even so, non-participation and unemployment rates are generally higher among those immigrants who reported using a language other than English or French in a job at some point between January 1, 2005 and May 16, 2006. Compared to those who did not use a non-official language, rates are especially high among those who used a non-official language exclusively, followed by those who used one most of the time. Rates, however, were slightly lower among those who used an official language most of the time but also used a non-official one regularly (Table 1).

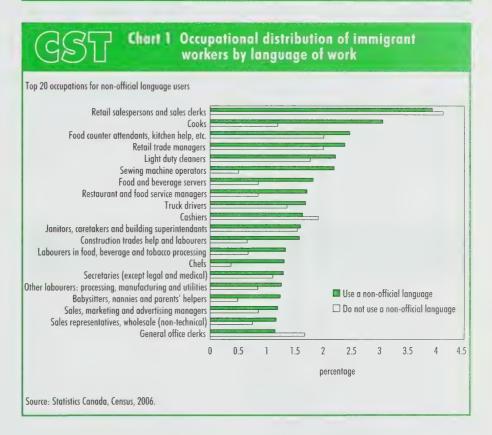
A similar pattern is observed with respect to part-time work. Parttime jobs are more common among those who use "only" a non-official language at work. They are less common, however, among those who use one in conjunction with an official language. This suggests that there may in fact be opportunities for those who use a non-official language, provided they also have some official language skills.

Table 1 Non-participation and unemployment as of Census Reference Week for immigrants who worked at some point over the previous 16 months, according to how often they used a non-official language at work

Use of	non-official	language	at work
--------	--------------	----------	---------

In Census reference week ¹	Do not	Also ²	Mostly	Only
		perce	entage	
Non-participation rate	8.0	6.8	8.6	15.0
Unemployment rate	4.4	3.8	4.6	8.0

- 1. May 7 to 13, 2006.
- 2. Uses an official language most of the time at work, but **also** regularly uses this non-official language at work. Source: Statistics Canada, Census, 2006.



Immigrants who use languages other than English or French are more often found in less skilled occupations

The occupational profile of immigrant workers who use languages other than English or French at work reflects many jobs that usually require less formal training and may be poorly paid. 10 Chart 1 shows the top 20 occupations selected for the

highest proportion of immigrants who are non-official language users. For the purposes of comparison, it also shows the proportion of immigrants who do not use non-official languages with any regularity in the same occupations.

There are comparatively more cooks, restaurant workers, cleaners, sewing machine operators, labourers and childcare workers among

immigrants who use a non-official language at work. There are also however more "retail trade managers," "marketing managers" and "sales representatives." Immigrants in these managerial occupations more often used a non-official language along with an official one. Among immigrants who worked in other languages, the proportion in occupations such as marketing and sales management declined as non-official languages gained in predominance. It was highest for those who used an official language most of the time (5.2%), followed by those who used a non-official language most of the time (5%), and was lowest for those who used a nonofficial language only (2.9%).

Immigrants who work in a language other than English or French are also concentrated in fewer occupations. About 36% are found in the 20 jobs listed in Chart 1. In contrast, the top 20 occupations for immigrant workers who do not use a non-official language at work reflect more skilled

occupations and account for only 31% of them.

The concentration is highest (53%) among those who regularly use "only" a non-official language. A quarter of this latter group is found in just 5 occupations: cooks, sewing machine operators, food counter/kitchen help, babysitters/nannies and light duty cleaners. Marketing managers and sales representatives, moreover, do not appear in the list of most important occupations for those who only use a non-official language.

Twenty industries employ over 40% of immigrants who work in a non-official language

Immigrants using a non-official language at work are also concentrated by industry (Chart 2). It tells much the same story.

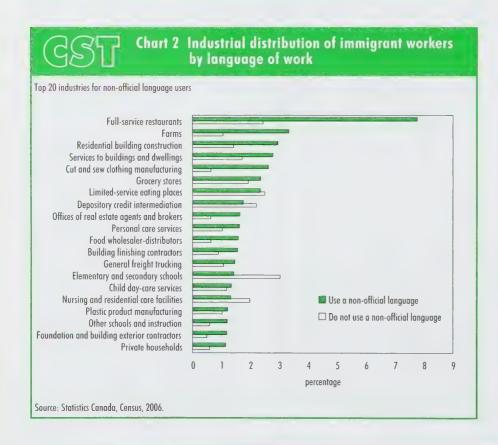
Restaurant employment accounts for a large proportion of immigrants who work in a non-official language, followed by farms, residential construction, building services, clothing manufacturing and grocery stores. The top twenty industries include over 40% of them. Full-service restaurants and limited-service eating places together account for over 10%.

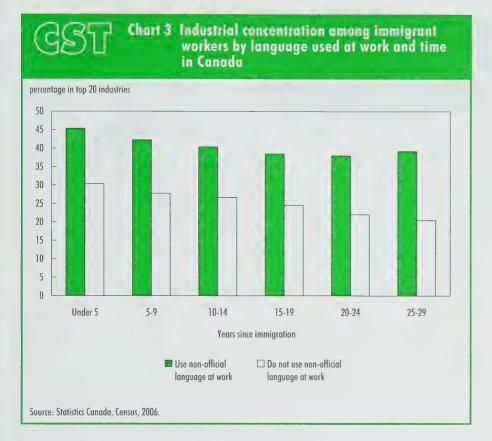
While cooks, sewing machine operators and janitors may not require highly-developed communications skills, there are a number of jobs and industries occupied by many persons using a non-official language that would seem to entail such skills. Retail and wholesale sales persons and managers, workers and managers in advertising and marketing, and real estate agents may require a good or excellent ability to communicate. Such people may hold their jobs precisely due to their ability to speak a non-official language and hence to reach growing immigrant markets. Comparatively few immigrants employed in sales, marketing or real estate speak a non-official language to the exclusion of English and French, however. They may use another language with some regularity but are also called upon to use an official tongue.

With time in Canada, immigrants appear less concentrated in industries typical of recently arrived people who work in non-official languages (Chart 3). This is especially relevant to those who do not use languages other than English or French at work. If immigrants indeed move from working in languages other than English and French to using these languages almost exclusively, they may also be moving into a wider array of industries and jobs.

Self-employment is more common for immigrants working in a non-official language than for immigrants working only in official languages

Immigrant workers who use nonofficial languages in their jobs tend more often to be self-employed than those who do not. In general, about 14% of immigrant workers are self-employed. Among those who use a non-official language at work, the self-employment rate is 21%. It





is highest among those who use a non-official language most of the time (23%) or regularly with an official language (22%). Among those who use a non-official language exclusively it is about 15%. The rate is about 12.5% for those who do not regularly use a language other than English or French.

The proportion of immigrant workers who are self-employed and employ others is about twice as high for those who use a non-official language compared with those who do not (10.8% versus 5.4%). The rate is under 8% for those who use "only" a non-official language.

Some immigrants may set up their own businesses to serve their communities in their own languages. These enterprises may also provide employment within those communities. Self-employed people are in a better position to control what language they use in the workplace. However, starting a business may be easier for those who have some command of English

and French and use them some of the time.

Earnings decrease as nonofficial languages are used more frequently on the job

According to the 2006 Census, immigrants who used a non-official language in their job were found in low-income households^{13,14} almost twice as often as were those who did not (22% vs. 12%). Almost 30% of those who made no regular use of English or French in their work lived in low-income households.

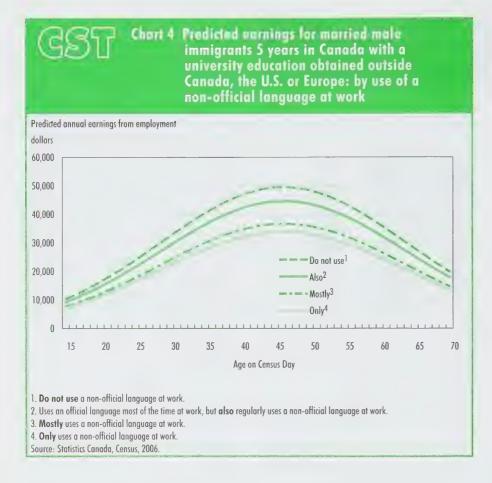
In 2005, immigrants who regularly used a language other than English or French at work¹⁵ earned on average \$11,000 less than those who did not. Those who only used non-official languages at work earned less than half as much as those who did not regularly use one.

Even when other human capital and worker characteristics are held constant (level of education, country of education, official language ability, years in Canada, marital status, age and sex), a difference between those who use non-official languages at work and those who do not persists (See Table A.1). When these factors are held constant, moreover, language of work appears to be at least as good a predictor of earnings as is official language ability ¹⁶ (See "What you should know about this study" for a description of the model used to control for other factors; regression coefficients are produced in Table A.1).

Chart 4 compares 2005 employment incomes by age for immigrant workers who: 1) do not use a nonofficial language at work; 2) use nonofficial languages regularly but English or French more often; 3) use nonofficial languages most of the time; and 4) use them almost exclusively. Other factors are held constant. The illustration is for married males with a university degree earned outside Canada, the U.S. or Europe who can speak an official language. This comparison is limited to immigrants who arrived before 2005 and who worked and earned income in 2005. The strong effect observed for age is related to immigrants who arrive when older and lack official language skills. 17

As can be seen in Chart 4, earnings decrease as non-official languages are used more frequently on the job. 18 This suggests that many immigrants who work in languages other than English or French are constrained to a certain limited number of occupations and industries where they are paid less. Annual earnings do increase with time in Canada, however a gap persists between those who use and those who do not use official languages in their job (See Table A.I).

It also appears that many workers who use non-official languages on the job are not able to bring their other skills fully to bear. For instance, when other human capital and worker characteristics are held constant (as above), the premium (higher value or extra payment) earned by a 43-year-old worker with a university



degree compared to one who has no such degree is over \$14,250 per year, provided they work in one of the official languages. If the worker regularly uses another language, the premium is only about \$5,800 (See Table A.2 for details).

While working in a language other than English or French seems to have negative implications for immigrant workers' earnings, linguistically-delimited markets or communities may well offer opportunities for those with limited language skills. Jobs in their mother tongue may provide a living while immigrants learn an official language and adapt their skills to the Canadian market.

Summary

Even holding other characteristics such as ability to speak in English or French, education and age equal, it seems that most immigrants who work in non-official languages are at a disadvantage with respect to other

workers. They have higher rates of unemployment, are in occupations usually requiring less formal training, earn less and are more often in low-income households. They also have less opportunity to bring their educational qualifications and other skills to bear (See interaction effect in Table A.2).

Employment in comparatively unskilled occupations and linguistically-delimited markets implies more limited opportunities for some immigrant workers. It is important to note however that for many, these occupations and markets seemingly serve as a sheltered base where newcomers earn a living as they acquire official language skills and become more accustomed to the specific requirements of the Canadian markets.

Some workers continue to use minority languages in their work for some time but most of them also use an official language. Minority language communities may also provide openings for professionals, self-employed immigrants and immigrant business persons in the form of markets and a work force that may not be accessible to the wider business community.



Derrick Thomas is a senior analyst with Social and Aboriginal Statistics Division, Statistics Canada.

 Chiswick, B. R. (1991). Speaking, reading, and earnings among low-skilled immigrants. *Journal of Labour Economics*, 9(2), 149-170.

Chiswick. B. R. and Miller, P. W. (2002). Immigrants earnings: language skills, linguistic concentration and the business cycle. *Journal of Population Economics*, 15(1), 31-57.

Pendakur, K. and Pendakur, R. (2002). Language as both human capital and ethnicity. *International Migration Review*, 36, 147-177.

- In some of Canada's territories, Aboriginal languages have official status. For the purpose of this article, however, "official language" refers to Canada's official languages, English and French. Very few immigrants use Aboriginal languages.
- 3. Chiswick, B. R. and Miller, P.W. (1988). Earnings in Canada: The role of immigrant generations, French ethnicity and language. In T.P. Schultz (Ed.), Research in Population Economics, 6 (pp. 183-228). Greenwich, CT: JAI.

Chiswick, B. R. and Miller, P.W. (2000). The complementarity of language and other human capital. *Economics of Education Review*, 22(2003), 469-480.

Pendakur and Pendakur. (2002).

- Ferrer, A., Green, D. and Riddell, C. (2006). The Effect of Literacy on Immigrant Earnings. Statistics Canada. Catalogue no. 89-552-MIE, no. 12. Ottawa: Ministry of Industry.
- Economic Council of Canada. (1991).
 Economic and Social Impacts of Immigration. Ottawa: Economic Council of Canada.
 - Creese, G. and Kambere, E.N. (2003). What colour is your english. Canadian Review of Sociology and Anthropology, 40(5), December, 565-573.
- Statistics Canada. (2008). Using Languages at Work in Canada, 2006. Statistics Canada, Catalogue no. 97-555-X. Ottawa: Ministry of Industry.

GST What you should know about this study

This article is based primarily on data collected via the 2B form in the 2006 Census of Population. It also makes use of some of the same information collected in the 2001 Census. One out of every five households in Canada receives the longer 2B form.

For each person aged 15 or over who is working or who has worked for pay or in self-employment over the current or immediately preceding calendar year, the census long form poses two questions. The questions are asked with reference to their current job, the job at which they worked the most hours (if they had more than one) or the job of longest duration if they are not working on Census Day. They are: (a) In this job, what language did this person use most often? and (b) Did this person use any other languages on a regular basis in this job? Respondents were able to check-off English or French or to specify another language.

Only immigrants who arrived before January 1st 2005 and who had positive earnings in that year are included. All persons who answer the language at work question on the census form have by definition been employed at some point in the recent past. Approximately 50,000 immigrants who lived in Canada in 2006 apparently worked outside Canada. In 2001 about 46,000 did so. These immigrants reported in the Census about jobs they held in another country. Some of them may have described a job they held before migrating, but in 2006 over three fifths of them were providing information about a job they held on Census Day. These foreign job holders span many occupations and countries of birth. Engineers, computer consultants figure prominently among them as do truck drivers and pilots. Many were born in China, the U.S., India or the UK. About half at each census said they worked in a non-official language. Because they work in a non-Canadian environment, these immigrants have been eliminated from the analysis.

Immigrants who work in Canada can be distinguished according to the extent to which they use non-official languages in their jobs. Jobs differ in the amount of communication they require, but the proportion of communication that takes place in a non-official language can be used to construct a scale.

At one end are those immigrants who "only" use non-official languages (2.8%); then those who "mostly" use non-official languages but who also use an official language with some regularity (4.2%); next are those who mostly use an official language but who "also" regularly use a non-official language (9%); and on the other end are those who "do not" use a non-official language at work with any regularity (84%).

The impact of language of work together with various kinds of human capital on annual earnings is explored using OLS regression analysis. The dependant variable is actually the natural log or earnings as this corrects for skewness in the raw measure. Quadratic terms are included along with the original terms for age and years in Canada as these effects are not linear and tend to dampen with time. Most of the other terms are dichotomies which reflect the presence or absence of a characteristic. The technique was initially pioneered by Mincer for the study of human capital (Mincer, 1974). Mincer models have been adapted by Chiswick (Chiswick, 1978, Chiswick and Miller, 1998, 2000 and 2002) to the study of labour market outcomes for immigrants and to the consideration of language skills. They have been standard in the literature on immigration.

Among the independent measures controlled for are: gender, age, years in Canada, education, marital status and location of study (or the country where each subject obtained their highest level of education). An interaction between language of work and education is also explored and is found to be significant. All the relationships discussed in the paper are significant at the .01 level and the tests of significance rely on weights which have been normalized to have a mean of one.

- The experienced labour force consists of those workers who held a job on Census Day along with people who had been employed at some point between January 1, 2005 and May 16, 2006.
- Wilson, K. and Portes, A. (1980). Immigrant enclaves: An analysis of the labour market experiences of Cubans in Miami. American Journal of Sociology, 86, 295-319.
 - Sanders, J. M. and Nee, V. (1987). Limits of ethnic solidarity in the enclave economy. *American Sociological Review*, 52, 745-767.
 - Hou, F. and Picot, G. (2002). Visible-minority neighbourhood enclaves and labour market outcomes of immigrants. In C. M. Beach, A.G. Green and J. G. Reitz (Eds.), Canadian Immigration Policy for the 21st Century (pp. 537-571). Kingston: John Deutsh Institute for the Study of Economic Policy, McGill-Queen's University Press.
- 9. Since the seminal article by Wilson and Portes in 1980, which described the experiences of Cubans in Miami, such communities or segmented markets have been referred to in the academic literature as enclaves. Enclaves consist of establishments, networks, markets and neighbourhoods where workers can function and sometimes thrive in another language. These linguistically-delimited communities or markets depend on a concentration of people who share not only a language but often an ethnic background, common experience and similar tastes.

- Blishen, B. R., Carroll, W. K., and Moore, C. (1987). The 1981 Socioeconomic index for occupations in Canada. The Canadian Review of Sociology and Anthropology, 24, 465-488
- 11. Portes, A. and Jensen, L. (1987). What's an ethnic enclave? The case for conceptual clarity. American Sociological Review, 52, 768-773.
 - Wilson and Portes. (1980).
- 12. According to Portes and Jensen (1987) one of the most important benefits of an immigrant enclave is that it provides newcomers with a greater opportunity for self-employment. Our data support that contention.
- 13. Low-income households as per Statistics Canada's definition of Low Income Cutoffs: A family unit with income below the cut-off for its family size and urbanization classification is considered a "low income" family. Base year low income cut-offs are set where families spend 20 percentage points more of their income than the Canadian average on food, shelter and clothing. Statistics Canada low income cut-offs are not generally applied to Indian Reserves, Yukon, Northwest Territories, Nunavut (or institutional residents).

- 14. Statistics Canada. (1999). Low Income Cut-offs. Statistics Canada, Catalogue no. 13-551-XIB. Ottawa: Ministry of Industry.
- 15. Care must be taken in interpreting these results. The Census data is a snapshot of Canadians taken at one point in time (cross-sectional). This makes it difficult to distinguish effects that are due to changes in individual immigrants' circumstances as they adjust over time to life in Canada, from effects due to changes in the characteristics of immigrants who arrive at different times.
- 16. Language of work tends to overpower language ability when they are used in the same model and when they are tested separately it results in a slightly better model.
- 17. Age, years in Canada, and age at arrival cannot be truly disentangled from data in a single cross-section.
- 18. Many immigrants unable to speak English or French may have been excluded from the analysis because they held no job in 2005 or 2006 and did not answer the questions about language of work, had no occupation to report and had no earnings from employment. Some may have been unable to find employment. Others may, for instance, have been studying English or French and did not seek employment.

CST

Table A.1 Models predicting the log of 2005 annual earnings from employment for immigrants who arrived before January 1, 2005

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
		unst	andardized re	gression coeff	icients	
Intercept	10.076	6.027	5.885	5.986	5.950	5.949
Use of non-official language at work (Do not)† Also¹ Mostly Only	-0.148 -0.418 -0.665	-0.168 -0.411 -0.581	-0.115 -0.314 -0.385	-0.117 -0.317 -0.386	-0.104 -0.303 -0.395	-0.103 -0.300 -0.378
Highest level of education (High school or less)† Some postsecondary ² University		0.203 0.424	0.212 0.509	0.213 0.507	0.038 0.350	0.037 0.349
Age Age in years Age in years squared		0.163 -0.002	0.153 -0.002	0.145 -0.002	0.149 -0.002	0.149 -0.002
Gender (Women)† Men		0.386	0.391	0.385	0.382	0.382
Time in Canada Years in Canada Years in Canada savared			0.037 -0.0004	0.038	0.033 -0.0004	0.033 -0.0004
Marital status (Single, divorced or other)† Married or common-law			0.0001	0.112	0.121	0.121
Location where highest certificate obtained (Other)† Canada United Kingdom United States Elsewhere in Europe Australia / New Zealand					0.222 0.214 0.221 0.133 0.374	0.223 0.214 0.221 0.133 0.374
Official language ability (English, French or both)† None						-0.030
Adjusted R squared	0.012	0.191	0.215	0.217	0.221	0.221

[†] Reference group.

Notes: R squared is a statistical measure of how well a regression line approximates real data points. It ranges between 0 and 1. All variables are significant at p < 0.01.

Source: Statistics Canada, Census, 2006.

^{1.} Uses an official language most of the time at work, but **also** regularly uses a non-official language at work.

^{2.} Some postsecondary includes registered apprenticeship or trades certificate or diploma, college, CEGEP or other non-university certificate or diploma, university, certificate or diploma below bachelor level.



Table A.2 Model predicting the log of 2005 annual carnings from employment for immigrants who arrived before January 1, 2005, showing the interaction between language at work and education

A CONTRACT AND A CONT	Model 7
	unstandardized regression coefficients
Intercept	5.939
Use of non-official language at work (No)† Yes	-0.137
Highest level of education (Less than university)† University	0.346
Age Age in years Age in years squared	0.150 -0.002
Age iii yeurs squareu	0.002
Gender (Women)† Men	0.382
Time in Canada	
Years in Canada	0.033 0.000
Years in Canada squared Marital status (Single, divorced or other)†	0.000
Married or common-law	0.121
Location where highest certificate obtained (Other)†	····
Canada	0.248
United Kingdom	0.213
United States	0.237
Europe elsewhere	0.158
Australia/New-Zealand	0.394
Official language ability (English and/or French)† None	-0.173
Interaction between non-official language at work and education Yes multiplied by University	-0.162
Adjusted R squared	0.220

† Reference group.

Notes: R squared is a statistical measure of how well a regression line approximates real data points. It ranges between 0 and 1.

All variables are significant at p < 0.01.

Source: Statistics Canada, 2006 Census.

The Daily Routine



Statistics Canada official release bulletin, every working day at 8:30 a.m. (Eastern time)





Is that right? You didn't read *The Daily*? Did you know that it's the best source of statistical information in the country?

Each working day,
The Daily provides economic and
social data that's available free of
charge on our Web site. Journalists
never miss it. Business leaders and
policy makers use it to make sound
decisions.

All new data from Statistics Canada must be officially announced in The Daily. So if you read it every day, you don't miss a thing!

The Daily delivers news directly from Statistics Canada—with easy-to-read news releases, informative tables and simple charts that clearly illustrate the news.

The Daily delivers the latest statistics and analyses on a variety of topics:

Census data

population statistics
trends in income
consumer price index
international trade
the labour force
gross domestic
product
manufacturing shipments
farm income data
retail trade
and more ...

Subscribe to *The Daily*. It's FREE.

Visit www.statoan.gc.ca to read
The Daily when you need it.
Or subscribe to the free online
delivery service and receive
The Daily automatically
by e-mail.

Add it to your dayto-day activities!

Métis in Canada: Selected findings of the 2006 Census

by Linda Gionet

As part of its contribution to dissemination of Census findings, Canadian Social Trends is highlighting some of the key social trends observed in the 2006 Census.

In this issue, we present an adaptation from Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census (Catalogue no. 97-558-X2006001), which focuses on Métis population in Canada.

n the 2006 Census, 389,785 people identified themselves as a Métis person. This represents nearly a doubling (a 91% growth) in the size of the Métis population since 1996. By way of comparison, the First Nations and Inuit populations grew 29% and 26%, respectively, over the same period; the non-Aboriginal population grew at less than one-tenth the rate (8%). Higher birth rates and a greater tendency to self-identify as Métis on the Census underlie this increase in the Métis population over the past decade. 3

The Métis account for more than one-third (34%) of the overall Aboriginal population, up from just over one-quarter (26%) in 1996.

Métis population is young and concentrated in the West

Nearly 87% of the Métis population lives west of Quebec, with the largest percentage in Alberta (22% in 2006), followed by Ontario (19%), Manitoba (18%), British Columbia (15%) and Saskatchewan (12%). Additionally, 7% of Métis live in Quebec, 5% in the Atlantic provinces and 1% in the territories (Chart 1).

Over two-thirds of Métis (69%) in Canada live in an urban area; of these, the majority (59%) live in a census metropolitan area (CMA) and the remainder (41%) in smaller urban centres with populations under 100,000. The CMAs with the largest number of Métis residents include Winnipeg (40,980), Edmonton (27,740), Vancouver (15,075), Calgary (14,770), Saskatoon (9,610) and Ottawa-Gatineau (7,990).

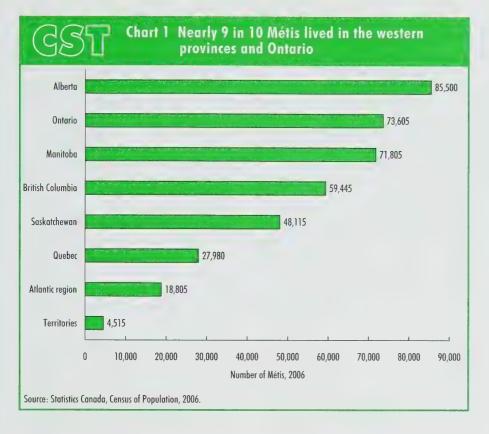
With a median age of 30 years, the Métis are younger than the non-Aboriginal population, which has a median age of 40 years. In fact, one-quarter (25%) of the Métis are children under age 15. A somewhat higher proportion of Métis in Saskatchewan (29%), Manitoba (27%) and Alberta (27%) are children.

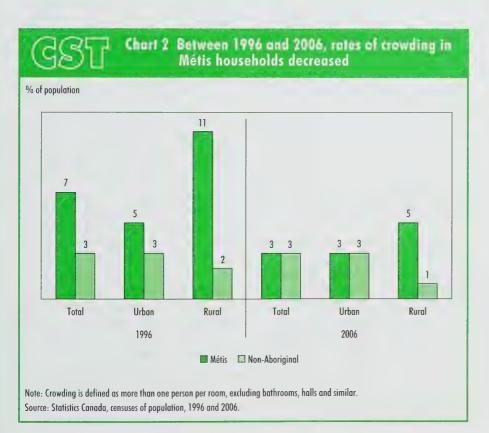
Métis children are almost twice as likely as non-Aboriginal children to live in a lone-parent family. In 2006, 31% of Métis children lived with a lone mother or father, compared with 17% of non-Aboriginal children. In Manitoba (35%) and Saskatchewan (36%), more than one-third of Métis children under age 15 lived with one parent. In cities where Métis made up a large proportion of the population – for instance, Winnipeg, Regina and Edmonton – about four in ten Métis children lived in lone-parent families

GST Who are the Métis?

In this article, Métis refers to people who identify as Métis on the Census. This definition differs from that adopted by the Métis National Council (MNC), whereby: "Métis means a person who self-identifies as Métis, is of historic Métis nation ancestry, is distinct from other Aboriginal peoples and is accepted by the Métis nation". According to the MNC, Métis ancestry derives, in part, from a person having ancestry from the historic Métis nation homeland, an area in west central North America.

Because the definition of Métis in this article is broader in scope than the MNC's definition, the information about the Métis population presented here may vary from that provided by the MNC's national registry.





Older Métis more likely to speak an Aboriginal language

Overall, 4% of Métis had knowledge of an Aboriginal language in 2006, down slightly from 5% in 2001. Those living in rural areas were more likely to be Aboriginal language speakers, at 6% compared with 2% of urban dwellers.

Older Métis were more likely to speak an Aboriginal language. An estimated 12% of Métis aged 75 years and over could converse in an Aboriginal language, compared with 9% of those aged 65 to 74, and 6% of people aged 45 to 64. Less than 3% of Métis aged 44 and younger spoke an Aboriginal language.

Cree is the Aboriginal language most often spoken among the Métis (9,360 speakers in 2006). Other languages spoken by Métis include Dene (1,620), Ojibway (1,345) and other Algonquian languages, as well as Michif (fewer than 1,000 speakers).

Although few Métis are able to converse in an Aboriginal language, about half of the Métis population have reported that keeping, learning or re-learning their Aboriginal language was important or very important to them.⁵

Crowding and need for major repairs

At the national level, 3% of Métis lived in crowded housing conditions in 2006, a rate equal to that of the non-Aboriginal population. This proportion marks a change from 1996, when 7% of the Métis population lived in crowded households.

Crowding was more common for Métis in rural than urban areas, at 5% compared with 3% in 2006. (In 2006, about one-third of the Métis population lived in rural areas.) Métis in rural Saskatchewan (11%) and rural Alberta (8%) were most likely to experience crowded housing conditions. Nevertheless, over the ten-year period from 1996 to 2006, rates of rural crowding declined in most parts of the country, especially in the Prairies. For instance, in rural

Saskatchewan it dropped from 21% to 11%, and in rural Alberta it fell by almost half from 15% to 8% (Chart 2).

While there is little difference overall between the Métis and non-Aboriginal populations in terms of crowding, Métis are more likely to live in homes that need major repairs. In 2006, 14% of Métis occupied dwellings that needed major repairs, a proportion twice as high as that of the non-Aboriginal population (7%).

Once again, conditions varied between the Métis living in rural (18%) compared to urban (12%) areas. In Ontario, Quebec, British Columbia and the Atlantic provinces, the gap was smaller, but in Saskatchewan and Alberta (where one-third of the Métis population reside), rural Métis were almost twice as likely as urban Métis to occupy housing that needed major repairs.

At the national level, levels of housing affordability among the Métis were similar to those for the non-Aboriginal population. In 2006, 22% of Métis lived in a household that spent at least 30% of its income on shelter costs, compared with 21% of the non-Aboriginal population. At the provincial level, Ontario (24%) and British Columbia (29%) recorded rates of housing affordability above the national Métis average. Additionally, the widest gap between the Métis and the non-Aboriginal population was in Saskatchewan, at 21% and 15%, respectively.

Métis are less likely than the non-Aboriginal population to own their own home. In 2006, 64% of Métis lived in a home that was owned by a member of the household; for the non-Aboriginal population, the proportion was 75%.

While the national homeownership rate is lower for the Métis population than the non-Aboriginal population, the provincial gap is particularly wide in the Western provinces. For instance, in Saskatchewan and Alberta, the proportion of Métis who lived in their own homes were 20 and 18 percentage points lower,

respectively, compared to the non-Aboriginal population.

College education more common among Métis

Half of Métis adults aged 25 to 64 have completed a postsecondary education: the comparable proportion in the non-Aboriginal population is 61%. A college education was most common, with 21% of Métis having completed a diploma, followed by a trades certificate (16%). Between 2001 and 2006, the percentage of Métis with a university degree increased from 7% to 9%. This percentage was 14 percentage points less than the non-Aboriginal population (23%).

In the Prairie provinces and New Brunswick, the proportion of Métis adults who have a postsecondary qualification was slightly lower than the national Métis average. In the remaining provinces, the proportion was higher than the Métis national average, aged 25 to 64.

Métis women were somewhat more likely to have a postsecondary education, at 51% compared with 48% of men in 2006. Métis women were more likely to have a college diploma – 25% versus 17% of men – while Métis men were more likely to have a trades certificate – 21% versus 12% of women. In addition, Métis women were slightly more likely to have a university degree, at 10% compared with 8% of men.

In most of the Atlantic provinces and in Quebec, Métis men had a greater likelihood than women of finishing a postsecondary education, particularly a trades certification.

Employment rates for adults of core working age

Between 2001 and 2006, the employment rates for Métis adults of core working age (aged 25 to 54 years) increased 4 percentage points from 70.4% to 74.6%. Although the Métis employment rate was lower than that of the non-Aboriginal population (81.6%), the gap has narrowed between these two populations by about 3 percentage points.

Métis employment rates were lower than those of the non-Aboriginal population across the country in 2006. The differences were widest in New Brunswick (18 percentage points), Prince Edward Island (14 points), Saskatchewan (14 points) and Quebec (13 points).

Métis men had higher employment rates than women, at 79.2% compared with 70.4%. In the provinces with larger Métis populations, Métis men had higher rates of full-time, full-year employment than Métis women. In parts of the country with smaller Métis populations, as in Newfoundland, New Brunswick, the Yukon and Nunavut, Métis women were more likely than Métis men to be employed.

Unemployment rates represent the proportion of people in the labour force who are looking for work but cannot find it. At the national level, unemployment rates of Métis adults of core working age were higher than those in the non-Aboriginal population—in 2006, 8.4% versus 5.2%, respectively.

Between 2001 and 2006, the unemployment rates for Métis decreased 4 percentage points from 12.5% to 8.4%. Although the Métis unemployment rate was lower than that of the non-Aboriginal population (5.2%), the gap has narrowed by 3 percentage points.

The percentage of unemployed Métis in the labour force was below the Métis national average west of Quebec, except in Saskatchewan and Nunavut.

The unemployment rate for Métis women was comparable to that for Métis men, at 8.2% compared with 8.6% in 2006.

Median income

In 2005, the median income of the Métis in Canada was lower than that of the non-Aboriginal population. Indeed, it was about \$5,000 less than the median income of \$25,955 reported for the non-Aboriginal population. Nonetheless, between 2000 and 2005, the Métis median

income increased by about \$2,600, over three times faster than the nearly \$800 increase for the non-Aboriginal population. This rise narrowed the income gap between the Métis and the non-Aboriginal population during this period.

Across the country, the difference in median income between the Métis and the non-Aboriginal population was widest in Alberta and in the territories. In Alberta, the Métis median income (\$22,839) was about \$6,600 less than that of the non-Aboriginal population (\$29,501). Within the small Métis population in the territories, there was a larger gap. In the Northwest Territories, for example, the Métis median income (\$36,211) was approximately \$13,000 less than that of the non-Aboriginal population (\$49,219).

In most regions, the median income of Métis women was less than that of Métis men. In 2005, it was about \$9,000 less (Métis men reported \$26,466), a difference consistent with that recorded in 2000. At the regional level, the gap was widest in Alberta and Nova Scotia. Métis women in Alberta made about \$14,000 less than Métis men (\$31,869) while Métis women in Nova Scotia made about \$10,200 less than their male counterparts (\$25,329).

Summary

In 2006, over one-third of people – almost 390,000 – who identified themselves as an Aboriginal person reported that they were Métis. In the last 10 years, the Métis population has grown by 91%, due to higher fertility rates, and an increasing tendency to self-identify as Métis.

Almost nine in ten Métis live in the Western provinces and Ontario. The Métis are the most urbanized of the Aboriginal groups, with 69% of the population living in an urban area in 2006.

Overall, housing conditions of the Métis population improved between 1996 and 2006. In 2006, about 3%

of Métis reported living in crowded conditions, about the same rate as the non-Aboriginal population; however, they were more likely to live in homes that needed major repairs, especially in rural areas.

Of those Métis who had completed a postsecondary education, most had obtained a college diploma or trades certificate. Between 2001 and 2006, the percentage of Métis who had completed a university degree increased.

Métis adults of core working age were less likely to be employed than the non-Aboriginal population, at 74.6% compared with 81.6% in 2006. In comparing the employment rates of the Métis and the non-Aboriginal population, the largest differences were recorded in New Brunswick (18 percentage points), Prince Edward Island (14 points), Saskatchewan (14 points) and Quebec (13 points).

GST

Linda Gionet is an analyst with the Aboriginal Statistics program, Social and Aboriginal Statistics Division, Statistics Canada.

- All estimates in this article are based on the Aboriginal identity population. For descriptions of definitions and concepts used, please see "What you should know about this study" at the end of this article
- Data have been adjusted to account for incompletely enumerated reserves in 1996 and 2006.
- Statistics Canada. (2005). Aboriginal Conditions in Census Metropolitan Areas, 1981-2001. Statistics Canada, Catalogue no. 89-613-MIE.Ottawa: Minister of Industry.
- Métis National Council. (2007) Who are the Métis: National Definition of Métis. Retrieved October 31, 2008 from Métis National Council Website: http://www.metisnation.ca/who/definition. html
- 5. Statistics Canada. (2008) Aboriginal Peoples Survey, 2006

Need more information from Statistics Ganada?

Call our inquiries line:

1-800-263-1136

To order publications:

Order line: 1-800-267-6677 Internet: infostats@statcan.gc.ca TTY line: 1-800-363-7629

Accessing and ordering information

Canadian Social Trends Print format, semi-annual (twice per year)

(Catalogue no. 11-008-X) \$24 per issue, \$39 per annual subscription

PDF/HTML format, every 6 weeks (Catalogue no. 11-008-X): Free

 A CST print anthology is now issued twice a year. The anthology contains all the CST articles released electronically in the previous six months, and the subscription price remains the same.

Education and Library Discount: 30% discount (plus applicable taxes in Canada or shipping charges outside Canada)

Standards of service to the public

Statistics Conada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada tollfree at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

If you're on the move...

Make sure we know where to find you by forwarding the subscriber's name, old address, new address, telephone number and client reference number to:

Statistics Canada Finance R.H. Coats Bldg., 6th Floor 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

or by phone at 1-800-263-1136 or 1-800-267-6677; or by fax at 1-877-287-4369; or by Internet at infostats@statcan.gc.ca

We require six weeks advance notice to ensure uninterrupted delivery, so please keep us informed when you're on the move!

(GS) What you should know about this study

Aboriginal identity refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit; and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada; and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): an area consisting of one or more neighbouring municipalities situated around a major urban core. A CMA must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgment of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or were self-employed or worked without pay in a family farm, business or professional practice. It includes those absent from their workplace due to vacation, illness, work disruption or other reason.

First Nations people: persons reporting a single response of "North American Indian" to the Aboriginal identity question. Although respondents self-identified as "North American Indian," the term "First Nations people" is used in this article.

Housing affordability: the share of household income spent on shelter costs, whereby a threshold of 30% is the upper limit for defining affordable housing, as defined by Canada Mortgage and Housing Corporation. Those who spend above the threshold may do so by choice, or they may be at risk of experiencing problems related to housing affordability. The data related to housing affordability does not include households living on reserve or on farms.

Income: refers to the total money income received from various sources during calendar years 2005 by persons 15 years of age and over. For a list of total income sources, please refer to 2006 Census Dictionary. http://www12.statcan.ca/ English/census06/reference/dictionary/pop020a.cfm

Inuit: persons reporting a single response of "Inuit" to the Aboriginal identity question. Inuit of the western Arctic are known as Inuvialuit; in this article, the term "Inuit" includes Inuvialuit.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the dollar amount where one-half of income recipients aged 15 years and over has more income and the other half has less income. Persons without income are not included in the calculation of this statistic. All dollar figures are expressed in 2005 constant dollars, i.e., in terms of their value, or purchasing power, in 2005.

Métis: persons reporting a single response of "Métis" to the Aboriginal identity question.

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and was available for work, and was looking for employment, was on temporary lay-off, or expected to start work within 4 weeks.

Urban areas: an area with a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

Who participates in active leisure?

by Matt Hurst

ngaging in physically active leisure—from participating in sports, to activities like walking, cycling and going on outdoor expeditions—is espoused as a way to stay fit and healthy, both mentally and physically. An active lifestyle has long been associated with health benefits. These benefits are not limited to vigorous physical activity, but can be achieved through frequent moderate levels of physical activity such as walking or cycling.¹

Healthier and more active lifestyles may generate considerable savings in health care costs. One study estimated there to be annual savings of 150 million dollars for a 10% reduction in physically inactive Canadians.² So leading an active life benefits the individual as well as society in general.

This article looks at the active leisure activities of Canadians aged 20 and over. Time-use diaries permit analysis of the type and length of activities done on a given day (See "What you should know about this study" for definitions). Using data from the 1992 and 2005 General Social Surveys (GSS), we will look at trends in active leisure participation rates from 1992 to 2005. We will also examine which groups are more likely to participate in active leisure in 2005.

Canadians are more active overall

More Canadians made active leisure choices³ in their daily lives over the period of 1992 to 2005. In 2005,

GST Summary

This article is about Canadians' participation in active leisure. Active leisure helps keep us fit and healthy. It can reduce health risk factors, such as those associated with growing obesity trends. It may also save health care costs. Between 1992 and 2005, the participation rate in active leisure rose while the time spent doing these activities remained the same. Results from this article include:

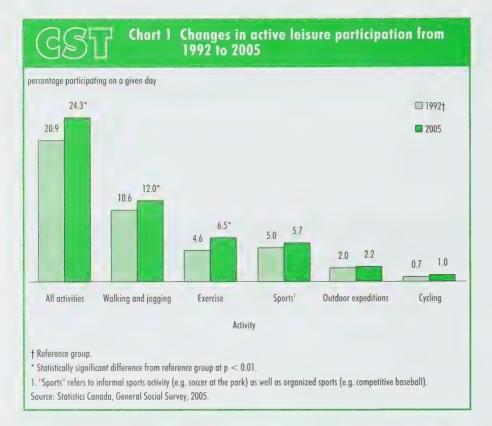
- Participation in exercise, as well as walking and jogging, grew from 1992 to 2005
- Although sports participation remained about the same in 1992 and 2005, people were slightly more likely to go swimming, possibly due to the hotter summer in 2005. Also, Canadians are moving away from organized sports to informal sports activity in their leisure time.
- Groups more likely to participate in active leisure, while holding other factors
 constant were: women, university-educated people, married people, and
 those with incomes of \$60,000 and over, those who reported their lives had
 a relatively low level of time stress, and those living in British Columbia or
 Quebec.

5.6 million of 23 million Canadians 20 years of age and over participated in active leisure on a given day. These activities require varying amounts of physical energy but are more physically demanding than sedentary activities like watching TV or sitting at the computer.

Participation in active leisure rose to 24.3% in 2005 from 20.9% in 1992 (Chart 1).⁴ On average, those participating in active leisure activities spent I hour and 46 minutes on a given day on these activities in 2005 (Table I). The time spent doing the activities listed in the table was similar in 1992.

Physical activity is known to be an ingredient in healthy weight maintenance, along with other contributing factors, such as diet. In Canada, waists are widening on average, as evidenced by trends in obesity⁵ from 1986 to 2004. Physical activity is linked to reduced risks of obesity-related health problems, even when it does not result in weight loss.⁶ Thus the rise in active leisure may help counteract the health risks of obesity trends.

Although participation in active leisure has risen somewhat, physical activity outside of leisure time, like at work, may be falling. In the past,



	Activity time
	minutes
All activities	106
Outdoor expeditions	186
Sports ¹	147*
Cycling	100*
Walking and jogging	69*
Exercise	65

a higher proportion of jobs were in manufacturing and agriculture that required high levels of physical activity.

With the shift in the economy to more service and office-related jobs which require less physical activity, leisure time activities have more influence on fitness and health. So how are Canadians spending this discretionary time, and which physically active pastimes are they following?

Participation in walking or jogging and exercise slightly higher in 2005

Canadians' most common active leisure activity was walking or jogging. In 2005, 12% of Canadians aged 20 and over walked or jogged, compared with 10.6% in 1992. This

small increase may be the result of relatively more people choosing to walk or jog as a form of physical activity, or simply more people getting outside to enjoy the day through a walk. Canadians who walked or jogged in 2005 did so for an average of 1 hour and 9 minutes on a given day.

Exercising (e.g. yoga, weight lifting, working out) was the second most likely active leisure activity and has gained in popularity. In 2005, 6.5% of Canadians exercised, up from 4.6% in 1992. In 2005, those who exercised did it for about 65 minutes.

Sports (5.7%), outdoor expeditions such as hunting, fishing, camping and boating (2.2%), and cycling (1.0%) rounded out the active leisure activities captured in the GSS activity diary in 2005. None of these activities showed much change in participation from 1992.

Many of the activities in these three groups are seasonal or require larger time slices. The weather may limit activities, particularly in the winter in much of Canada. Also, participation in these activities was less likely than in leisure activities that can take shorter slices of time, such as walking or exercising.

For example, outdoor expeditions averaged about 3 hours in duration and sports activities averaged about 2½ hours in 2005. Cycling is shorter in duration, partially due to fewer restrictions on how long the activity lasts. In 2005, the average cycling trip lasted 1 hour and 40 minutes.

As well, many sports have fixed time durations and it takes additional time to get to where the sport is taking place. Outdoor expeditions to camp or fish have similar time demands.

Informal sports activity on the rise

This analysis found that Canadians participated in sports at about the same rate in 1992 as in 2005. The term "sports" includes informal sports activity as well as organized sports. Other studies have shown

large declines in organized sport participation.^{7,8} For GSS respondents who reported they did not participate in organized sports, the sports participation rate increased (from 1.1% in 1992 to 3.0% in 2005).⁹ This suggests that people are moving away from sports that are organized to those that are not.

Sports in detail: more people are choosing to swim

The stable trend of leisure sports participation masks differences between groups of sports (Table 2). Field sports (for example: football, basketball, baseball, volleyball, hockey, soccer, field hockey), as well as racquet sports (for example: tennis, squash, racquetball, paddleball) and lane and table sports and activities (for example: bowling, pool, pingpong, pinball) are on the decline with a smaller proportion of Canadians playing these sports.

Although participation in soccer or volleyball could not be isolated in this article, other research has shown that they individually are on the rise. ¹⁰

Swimming participation increased. The GSS shows the participation rate doubled to 2.0% in 2005 from 0.9% in 1992, which suggests an increase of about 300,000 more swimmers on a given day.

Climate trends may be a part of the reason for this increase. A hotter summer in 2005 may be one reason why more people chose swimming as a leisure activity.^{11,12}

Personal characteristics impact participation

Analysis of the results of the 2005 GSS revealed that there are a number of socio-economic characteristics associated with active leisure participation. Other research has shown that participation in active leisure is influenced by cultural and social attitudes. ¹³ This article's statistical analysis measures the odds of participating in active leisure activities on a given day, isolating the impact of one characteristic of interest at a time (by removing the effects of the other characteristics).

Canadians with more leisure time are more likely to participate in active leisure. For each additional hour of leisure time, the odds of participating increase 1.2 times (Table 3). More available time means more opportunity to do something active.

On a level playing field, women are more likely to participate in active leisure than men

Equal percentages of women and men engaged in active leisure activities

in 2005. But, after accounting for other socio-economic characteristics or factors (see Table 3 for factors), women had 1.2 times the odds of participating in active leisure than men.

One key factor explaining this gender difference in the odds of participation is total leisure time. Men had more leisure time than women (5 hours and 35 minutes versus 5 hours and 16 minutes) which means they had more opportunity to be active in leisure. If this difference did not exist and men and women had theoretically the same opportunity, women would have higher odds of participating than men.

Older Canadians participate more because of more leisure time

Canadians aged 60 and over have more time for leisure than others, which increases their opportunity for active leisure. In fact, they have higher active leisure participation rates (28% for people aged 60 and over and 23% for those aged 20 to 39 years). However, when the amount of leisure time is accounted for along with other factors, age no longer has an influence on the odds of participating in active leisure.

Highly educated Canadians participate more in active leisure

Higher levels of education were also associated with higher odds of active leisure. Other studies have found the same link between education and physical activity in general.¹⁴ Educational institutions also provide direct experience in many competitive sports and the resources to do them.

Completing higher levels of education beyond high school reinforces this connection. In fact, university graduates had 1.5 times the odds of participating compared to high school graduates. Participation in organized sports follows a similar pattern.¹⁵

GST	Table 2	Participation in given day	various grou	ps of sports on a

	1992†	2005		
	percentage			
Golf	0.6	0.8		
Swimming	0.9	2.0*		
Field, court, lane, table sports ¹	2.8	1.7*		
Other sports ²	1.2	1.2		

- † Reference group.
- * Statistically significant difference from the reference group at p < 0.01.
- Includes football, basketball, baseball, volleyball, hockey, soccer, field hockey, tennis, squash, racquetball, paddleball, bowling, pool, ping-pong, pinball.
- Includes skiing, ice skating, sledding, curling, snowboarding, judo, boxing, wrestling, fencing, rowing, canoeing, kayaking, wind surfing, and sailing.

Source: Statistics Canada, General Social Survey, 2005.

GST

Table 3 Socio-economic characteristics of active leisure participation, 2005

	Participation rate	Model
	percentage	odds ratio
Total leisure time (hours)	•••	1.2*
Gender		
Men†	25	1.0
Women	24	1.2*
Age (years)		
20 to 39†	23	1.0
40 to 59	23	1.0
60 and over	28*	1.0
Education (highest level)		
University degree	29*	1.5*
Diploma /certificate from community college or trade/technical	24	1.1
Some university/college diploma	25*	1.2
High school diploma†	22	1.0
Less than high school diploma	20	0.7*
Marital status		
Not married or common-lawt	24	1.0
Married or common-law	24	1.2*
Children of any age in the household		
Nonet	26	1.0
1 or more children	22*	0.9
Region		
Atlantic region	22	1.1
Quebec	26*	1.3*
Ontario	24*	1.1
Prairie region†	21	1.0
British Columbia	28*	1.4*
Personal income (\$)		
Less than 30,000†	24	1.0
30,000 to 59,999	25	1.2*
60,000 and over	27*	1.3*
Time stress		
Low†	28	1.0
Moderate	24*	0.9
High	18*	0.7*

... not applicable

† Reference group. For the results from the logistic model, the odds ratio of the reference group is always one.

* Statistically significant difference from the reference group at p < 0.05.

Source: Statistics Canada, General Social Survey, 2005.

Living with a partner increases odds of participating

Canadians who are living with a partner have higher odds of participating compared to those who are not. Canadians who were married or in a common-law relationship had 1.2 times the odds of participating in active leisure, after controlling for other factors such as time stress, the presence of children, and total leisure time available on the diary day.

Parents participate less due to less leisure time

People with children tend to have less leisure time than people with no children in the home. Parents devote time to childcare and are busy with their kids' activities, so they have less opportunity for active leisure themselves. As role models for their children, parents may be motivated to be more physically active. Parents may also be more physically active

because they may involve themselves directly in their kids' activities.

According to the GSS, parents participate in active leisure less than people without children (22% versus 26%). However, when leisure time is taken into account, the odds of parents participating become the same as for adults without children. In a theoretical world where parents had the same amount of leisure time as people without children, their active leisure participation would be about the same.

Regional factors play a part

In 2005, people in Quebec and British Columbia were more likely to participate in active leisure than those living in the Prairie Provinces, while accounting for other factors. British Columbia may experience higher active leisure participation because the milder climate on the West Coast reduces barriers for active leisure throughout the year.

Higher-income Canadians are more active in leisure

Canadians with a higher personal income had higher odds of participating in active leisure. Canadians whose income was \$60,000 and over had 1.3 times the odds of participating in active leisure compared to Canadians with an income of less than \$30,000 per year in 2005, while accounting for other factors.

Higher-income Canadians have less leisure time than those with lower income, but in 2005, they spent a larger proportion of their limited leisure time being physically active. For example, those with annual personal income over \$60,000 spent 9.1% of their leisure time being active, compared with 6.5% of those with income under \$30,000 (Table 4).

Higher-income Canadians may have more money to spend on sports equipment, exercise classes, or have access to fitness facilities at their place of work. Higher-income people may also live in neighbourhoods which have fewer safety concerns and which are more accessible to facilities that have physical activity options (parks, gyms, bicycle trails, etc.).

Research has shown that people "with higher incomes report stronger beliefs in the stress reduction potential of regular physical activity". ¹⁶ Looking at people's perceptions of time stress overall, regardless of income, the analysis finds that high levels of time stress are associated with less participation in active leisure. In fact, people who reported

having a high level of time stress had lower odds (0.7 times) of participating compared to low time stressed individuals, while accounting for other factors. Time-stressed people don't feel they have much time for active leisure because other areas of their lives are consuming their attention.

Conclusion

Active leisure helps keep us fit and healthy. It may also reduce health care costs. Between 1992 and 2005.

overall participation in active leisure increased while the time spent doing these activities has remained the same

Participation in exercise, as well as walking and jogging, grew from 1992 to 2005. Although the sports participation rate remained about the same in 1992 and 2005, people were slightly more likely to go swimming, possibly due to the hotter summer in 2005. Also, Canadians are moving away from organized sports to informal sports activity in their leisure time.

Canadians who engaged in active leisure, while holding other factors constant, were more likely to be women, to be university-educated, married, to have an income of \$60,000 and over, to report that their lives had a relatively low level of time stress, and to live in British Columbia or Quebec.

GST

Matt Hurst is a senior analyst with Canadian Social Trends, Social and Aboriginal Statistics Division, Statistics Canada.

Table 4 Leisure time on a given day by income,	2005
--	------

	Personal income			
Less than \$30,000†	\$60,000 and over			
	minutes			
356	302*	279*		
25	26	30*		
	percentage			
6.5	7.9*	9.1*		
	\$30,000† 356 25	\$30,000† \$59,999 minutes 356 302* 25 26 percentage		

[†] Reference group.

Source: Statistics Canada, General Social Survey, 2005.

(GST

During the work week, the evenings are the time for active leisure

Depending on their lifestyle and social circumstances, Canadians are more physically active on different days of the week and at different times of the day (Chart 2).

According to the GSS time use results, on weekdays, those who are working full-time concentrated their active leisure activities in the evening and, to a lesser extent, before work in the morning and during lunch.

In contrast, those who do not work on weekdays, spread their active leisure throughout the day, but less so during the evening. On weekend days, Canadians who are not working are more likely to be physically active in their leisure time compared to during the week, and that activity is often done in the afternoons.

Chart 2 Canadians participating in active leisure, by time of day, 2005



1. This line has breaks where the data are not reliable.

Notes: Chart describes only those who participated in active leisure on a given day. The data is smoothed using the surrounding data points. The smoothing utilizes 5-period, centred moving averages. Each period is 5 minutes.

Source: Statistics Canada, General Social Survey, 2005.

Statistically significant difference from the reference group at p < 0.05.

- Chen, J. and Millar, W. J. (1999). Health effects of physical activity. Health Reports, 11(1), 21-30. Statistics Canada, Catalogue no. 82-003. Ottawa: Minister of Industry. Retrieved June 5, 2008, from http://www.statcan.gc.ca/studiesetudes/82-003/archive/1999/4638eng.pdf
- 2. Katzmarzyk, P. T., Glendhill, N. and Shephard, R. (2000). The economic burden of physical inactivity in Canada. Canadian Medical Association Journal, 163(11), 1435-1440.
- 3. Active leisure choices include sports, exercise, walking and jogging, cycling, and outdoor expeditions if they are part of the individual's leisure time. But if, for example, a person walks, jogs or cycles to work this is considered to be a commuting activity; mode of commuting is not counted as a leisure activity.
- 4. Further research (not shown here) on Canadians aged 12 and over indicates that leisure physical activity rates, calculated using different surveys and measurement methodologies, have also increased from 1994/1995 to 2005 from 39% to 51%, based on Statistics Canada's CANSIM Table 105-4033. Retrieved on June 5, 2008 from http://cansim2.statcan.gc.ca:81/WDS74_2_CANSIM/TableViewer/tableView.aspx?ReportId=3411&IF_Language=eng
- Shields, M. and Tjepkema, M. (2006). Trends in adult obesity. Health Reports, 17(3), 53-59. Statistics Canada, Catalogue no. 82-003. Ottawa: Minister of Industry. Retrieved on June 5, 2008 from http://www.statcan.gc.ca/studies-etudes/82-003/archive/2006/9279-eng.pdf

- 6. Janiszewski, P. and Ross, R. (2007). Physical activity in the treatment of obesity: beyond body weight reduction. Applied Physiology, Nutrition and Metabolism, 32(3), 512-522.
- Fidelis, I. (2008). Sport Participation in Canada, 2005. Statistics Canada, Catalogue no. 81-595. Ottawa: Minister of Industry. Retrieved on June 5, 2008 from http://www.statcan.gc.ca/pub/81-595-m/81-595-m2008060-eng.pdf
- 8. Fidelis measured organized sports participation as regular participation in an organized sport over a year (i.e., if a person regularly participated in an organized sport during their sport's season at some time during the year, then they were considered an organized sports participant). This is a considerably different concept than participation in sports (informal or organized) on a given day as used in this article. The Fidelis research showed that organized sports participation dropped from 45% in 1992 to 28% in 2005. Organized sports are defined by Sports Canada and include those sports engaged in for the purpose of competition. Organized sport involves formal rules and procedures, requires tactics and strategies, specialized neuromuscular skills and a high degree of difficulty and effort. The competitive nature of sport implies the development of trained coaching personnel. This is a much narrower concept of sport than used in this article where recreational sports activities (such as a simple pick-up game of hockey or basketball) are included.

- 9. Use the 1992 estimate with caution.
- 10. Fidelis. (2008).
- 11. For instance, the largest population centres in Canada, Toronto and Montreal, both having public beaches and public pools where people can swim, had higher average maximum temperatures per day for July and August in 2005 (5.9°C higher for Toronto, 3.6°C for Montreal) compared to 1992.
- 12. Environment Canada. (2008). Climate data online. Ottawa: Minister of Environment. Retrieved May 14, 2008 from http://www.climate.weatheroffice.ec.gc.ca/climateData/canada_e.html
- Henderson, K. A. and Bialeschki, M. D. (2005). Leisure and active lifestyles: Research reflections. Leisure Sciences, 27(5), 355-365.
- 14. Ross, C. E. and Wu, C. (1995). The links between education and health. American Sociological Review, 60(5), 719-745.
- 15. Fidelis. (2008).
- 16. Gauvin, L. (2003). Social Disparities and Involvement in Physical Activity: Shaping the Policy Agenda in Healthy Living to Successfully Influence Population Health. Montréal: Groupe de recherche interdisciplinaire en santé, University of Montréal, p.7.

GST What you should know about this study

This article is based on time use data collected using a 24-hour time diary in the 1992 and 2005 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends for Canadian society. It collects information from Canadians aged 15 and over living in private households in the 10 provinces. This article excludes those aged 15 to 19 and those who are students. With these exclusions, the sample is 8,778 people for 1992 and 17,738 for 2005.

The **time-use diary** provides a detailed record of the duration (in minutes) and timing of each activity during the **diary day**. Each respondent recorded their activities for only one day (diary day). Collection of diary data covered a 12-month period.

A given day: This study uses "a given day" to mean an average of all the diary days in the year of collection.

Activity participation rate (time use): The proportion of the population (or sub-population) that spent some time on the activity on a given day.

Average time spent on activities by participants (time use): The total time spent by all participants on a given activity divided by the number of participants in that activity.

Leisure time: Time spent in activities outside of work and household responsibilities. It may include time spent watching children as a concurrent activity. Example of leisure activities include: watching TV, playing sports, and playing cards.

Active leisure time: Time spent doing sports, exercise, walking and jogging, cycling and outdoor expeditions. Time spent walking, jogging and cycling to perform another activity, such as shopping, or to get to work, are excluded.

Exercise: Includes yoga, weight lifting and related activities.

Walking and jogging: Also includes hiking and running.

Outdoor expeditions: Includes hunting, fishing, boating, camping and horseback riding.

Sports: Refers to golf; swimming (includes waterskiing); field, court, lane and table sports (includes football, basketball, baseball, volleyball, hockey, soccer, field hockey, tennis, squash, racquetball, paddleball, bowling, pool, ping-pong, pinball); and other sports (includes skiing, ice skating, sledding, curling, snowboarding, judo, boxing, wrestling, fencing, rowing, canoeing, kayaking, wind surfing, and sailing. "Sports" refers to informal sports activity as well as organized sports.

Time stress: The GSS asked a series of 10 questions about time stress. People were categorized as having low time stress if they answered yes to 0 to 2 questions, having a medium level of stress if they answered yes to 3 to 5, and a high level of stress if they answered yes to 6 to 10 questions.

Married: Includes people who are married and those living in a common-law relationship.

Life in metropolitan areas

Are suburban residents really less physically active?

by Martin Turcotte

he health benefits of physical activity are numerous and widely recognized by scientists and public health authorities. Not everyone benefits in the same way, however, as participation in physical activity varies appreciably by age, health, gender, income, personal taste and so on.²

Aside from these factors, does participation in physical activity differ according to the type of neighbourhood where people live? Does living in a suburb make people less active than they would be if they lived in a city? These questions have interested urban planners and public health researchers over the last decade.^{3,4,5}

According to many experts, North American suburbs encourage physical inactivity because they are built almost exclusively for the automobile. Walking or cycling to workplaces, retail stores or other types of services is unrealistic in most suburbs. The same is true in most rural areas.

In contrast, living in the city centre promotes physical activity because in traditional urban neighbourhoods, homes, services, stores and workplaces are mixed together, which reduces the distance between them. In that kind of environment, residents burn calories without even realizing it as they simply go about their daily business.

GST

Summary

This study is the first of its kind to cover all of Canada's metropolitan areas. It differs notably from previous studies in that it examines the relationship between urban planning and various types of physical activities. It reveals that although the activities practiced differ by type of neighbourhood, total activity levels are quite similar wherever people live.

In fact, people living in low-density residential areas are as likely to be physically active over the course of a day as those in high-density areas. However, people living in the central urban neighbourhoods of Canada's largest metropolitan areas are the most likely of all to be physically active.

The type of physical activity varies by place of residence. Residents of urban areas are more likely to get around actively, i.e. by walking or cycling, while tending to their daily affairs. On the other hand, residents of suburban areas are much more apt to get their exercise by performing outside work (gardening, yard work and cleaning).

In view of those findings, some experts suggest that we take a page from the past in the way we design and build neighbourhoods in our cities to promote physical activity and health. 6.7.8 "New urbanism," an influential trend in urban planning, advocates such changes as a greater mix of residential, commercial and office use, higher density, more sidewalks and better connectivity between streets. 9

This study, for the first time in the context of Canada's larger metropolitan areas, quantifies the difference between the physical activity levels of residents of traditional urban neighbourhoods (highdensity) and of residents of typical suburban neighbourhoods (lowdensity). With data from the 2005 General Social Survey (GSS) on time use, it focuses on the activities of people aged 15 and over. Time-use

GST What you should know about this study

This study is based on data collected by Statistics Canada in the 2005 General Social Survey (GSS). The GSS is an annual survey that measures changes and new trends in society. The 2005 survey was the fourth to collect time-use information from Canadians aged 15 and over living in private households in the 10 provinces.

Survey respondents completed a **time-use diary** to provide a detailed record of the duration (in minutes) and timing of each activity during one day, the **diary day**. Collection of diary data covered a 12-month period, thus participation rates and durations are averages of all diary days of the year.

The data were collected from 19,597 respondents, who represent nearly 26.1 million people. The study deals with the data from 11,653 respondents who were living in one of the 27 census metropolitan areas (CMAs). Table 2 is based on an analysis of 6,738 respondents who were residents of the six largest CMAs (Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary and Edmonton).

Low-, medium- and high-density neighbourhoods

Neighbourhood density is based on the type of housing in the census tract where a respondent lives. A census tract generally corresponds to what people consider to be a neighbourhood. Census tracts are small, relatively stable geographic areas that usually have a population of 2,500 to 8,000 people. They are located in CMAs with an urban core population of 50,000 or more as determined in the previous census.

The terms **suburbs**, **suburban** neighbourhoods correspond to **low-density** neighbourhoods. The term **mixed** neighbourhood and **medium-density** are synonymous. **Urban** and **typically urban** have the same meaning as **high-density**.

Low-density or typical suburban neighbourhoods consist mostly of single houses, semi-detached houses and mobile homes, which are regarded as traditional suburban housing. Conversely, **high-density** or traditional urban neighbourhoods are essentially composed of apartment or condominium buildings and row houses. (They accommodate more people per square kilometre.)

To classify neighbourhoods by density, we determine the proportion of traditional suburban housing units in each neighbourhood. This type of housing makes up at least 66.6%

of the units in **low-density** neighbourhoods, between 33.3% and 66.6% in **medium-density** neighbourhoods (mixed neighbourhoods), and less than 33.3% in **high-density** neighbourhoods.

Central and peripheral neighbourhoods

Central urban neighbourhoods lie within a five-kilometre radius of the **city centre**. In this study, the city centre corresponds to the census tract that includes the city hall of the CMA's central municipality. That area includes well-known urban neighbourhoods such as the Plateau Mont-Royal in Montréal, The Annex near the University of Toronto, and Yaletown in Vancouver.

Peripheral urban neighbourhoods are located outside the five-kilometre radius of the city hall.

For more information on how these criteria are defined, see Turcotte, M. (2008). "The city/suburb contrast: How can we measure it?" Martin Turcotte. (2008) Canadian Social Trends, 85, Statistics Canada, Catalogue no. 11-008-X. Available electronically at: http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=11-008-X200800110459&lang=eng

The minimum recommended level of physical activity

According to the Public Health Agency of Canada, 30 minutes of moderate physical activity (brisk walking, bicycling, raking leaves) will have a number of positive effects on a person's physical and mental health. Sixty minutes of light physical activity (walking at a moderate pace, easy gardening, etc.) will also help people stay in shape or improve their health, as will 20 minutes of vigorous physical activity (jogging, playing hockey). ¹

One of the important advantages of the GSS on time use compared with other surveys is that respondents were not asked directly whether they had engaged in any physical activity in recent weeks or months. This was done to avoid the bias that occurs when the question is asked directly, which results in an overestimate of the incidence of physical activity. However, the GSS on time use does not distinguish between activities on the basis of intensity level. For this study we set the minimum period of activity at 20 minutes to ensure that people who had "only" 20 minutes of vigorous physical activity on the diary day were included as physically active. ³

GST What you should know about this study (continued)

Paid employment and physical activity

This study focuses on daily travel, recreational activities and domestic chores, reflecting the concerns of health experts who recognize that **whether** people are physically active is more important than **how** they get their physical activity. However, the type of job that a person has may also affect his or her level of physical activity. For example, it is reasonable to assume that a construction worker will be more physically active on the job than an office worker. Additional analyses (not presented here) have shown that job type (whether physical effort was involved or not) does not alter the study's qualitative conclusions.

- Public Health Agency of Canada. Retrieved July 2, 2008 from www.phac-aspc gc ca/pau-uap/paguide/why.html
- Katzmarzyk, P. T., and Tremblay, M. S. (2007). Limitations of Canada's physical activity data: Implications for monitoring trends. Canadian Journal of Public Health, 98(suppl.2), S185-S194.
- 3 This measure is obviously not perfect. Some people may have walked very slowly for 20 minutes and done nothing else the rest of the day, which would be below the required threshold for that level of effort (60 minutes). Even so, they are better off than people who had no physical activity at all during the day. The objective here is not to have a perfect measure of the day's physical activity (such data simply do not exist at the moment) but to identify the differences between various population groups, especially differences related to their neighbourhood type.

diaries permit analysis of the type and length of activities done on a given day (See "What you should know about this study" for definitions and concepts).

Unlike some other research, 10,11 this study does not attempt to establish a relationship between living in a suburban area and body mass index or obesity. Obesity is a complex issue, and physical activity is just one of the many factors affecting weight. Moreover, the GSS collects no information about a respondent's weight.

Suburban residents are less likely to walk or use a bicycle for routine travel

Nearly every recent study has found that residents of typical suburban neighbourhoods were more likely to use a car for routine travel and much less likely to walk or cycle. ¹² This study makes the same observation.

Residents of areas that had the characteristics of traditional suburbs were half as likely to have walked or used a bicycle on at least one non-recreational trip (14%) as residents of more densely-populated urban neighbourhoods (30%). (In this analysis, non-recreational travel includes trips made for the purpose of going to work, running errands

or visiting friends but excludes recreational walking or cycling.)

With regard to travel time, the average time spent by residents of typically urban neighbourhoods travelling on foot or by bicycle was almost three times more than that of residents of typically suburban neighbourhoods (an average of 11 and 4 minutes a day respectively). When only those residents who walked or cycled are considered, the average travel times for high-, medium- and low-density neighbourhoods were 35, 30 and 28 minutes respectively. This indicates that urban dwellers are more likely to travel on foot or by bicycle, and when they do so, it is for longer periods.

Several factors other than type of neighbourhood, such as income, age and health status, are associated with the possibility of having made a physically active journey (Table A.1). For example, people with the lowest household income (less than \$40,000) are more likely to have made at least one physically active trip, probably because fewer of them have a car. Nevertheless, when we compare the variables, the one with the greatest impact, apart from age, was type of neighbourhood (urban, mixed or suburban). The correlation between living in an urban area and

the probability of having made at least one physically active journey during the day remained strong and positive when all the other factors in the analysis were kept constant (Table A.2).¹³

Residents of the suburbs get exercise by gardening or doing yard work; urban residents by travelling

Even though residents of suburban neighbourhoods travel less often on foot, they may be more likely than residents of traditional urban neighbourhoods to engage in physical activity during their free time (walking, cycling, working out, playing sports). Since their yards and houses are generally larger, it is also plausible that suburbanites are more likely to get exercise as they perform household chores (gardening, yard work, indoor and outdoor cleaning). Is that really the case?

Of all the activities that require physical effort on a given day, the most common is indoor cleaning (25% of Canadians engaged in that activity). On average, residents of metropolitan areas spent about 26 minutes dusting, vacuuming, cleaning the bathroom and other indoor cleaning (Table 1). While women devoted much more time to

GST

Table 1 Residents of urban neighbourhoods are more likely to make physically active trips

		Residential density			
ople doing	High	Medium	Low †		
Non-recreational travel by foot or by bicycle					
Participation (%)	30*	18*	14		
Average duration, all (minutes)	11*	5*	4		
Average duration of participants ¹ (minutes)	35*	30	28		
Indoor cleaning					
Participation (%)	25	26	25		
Average duration, all (minutes)	24	27	25		
Average duration of participants ¹ (minutes)	96	105	101		
Gardening, yard work / outdoor cleaning					
Participation (%)	5*	9*	12		
Average duration, all (minutes)	6*	10*	15		
Average duration of participants ¹ (minutes)	118	111	123		
Physical activity in leisure/sports					
Participation (%)	25	24	25		
Average duration, all (minutes)	27	23*	28		
Average duration of participants (minutes)	108	96*	112		
All sources of physical activity (total)					
Participation (%)	60*	57	56		
Average duration, all (minutes)	67	66*	72		
Average duration of participants ¹ (minutes)	113*	115*	128		
20 minutes or more of physical activity					
Participation (%)	53	51	52		

- † reference group
- * statistically significant difference from reference group at p < 0.05
- 1. Participants are those who spent one minute or more doing this activity on a diary day.

Source: Statistics Canada, General Social Survey, 2005.

this activity than men (37 minutes compared with 13 minutes), the type of neighbourhood made no difference. Even though suburban residences are generally more spacious, participation rates and average lengths of time were practically the same in low-, mediumand high-density neighbourhoods.

There was also no difference between residents of typically urban and suburban neighbourhoods with regard to participation in sports or other physical recreation activities. About one person in four engaged in those activities (Table 1).

For gardening, yard work and outdoor cleaning, the picture is completely different. The distinction between urban and suburban neighbourhoods, in both participation rate and duration of the activity, is clear-cut. In low-

density neighbourhoods, 12% of residents gardened, did vard work or cleaned the outside of their houses, compared with 9% of residents of medium-density neighbourhoods and just 5% of residents of highdensity neighbourhoods. They spent an average of 15, 10 and 6 minutes respectively on those activities (Table 1). When other factors associated with participation in gardening, yard work or outdoor cleaning are held constant (such as age, gender, household income and the presence of children), the conclusions remain the same (Table A.2).

The fact that yards are almost always larger in the suburbs means that there could be more room for gardening. It also means that there is more snow to shovel in the winter, more grass to cut in the summer, and more outdoor chores of all kinds to complete. Whether or not these outdoor maintenance activities play a role in the decision on where to live, they increase the physical activity level of many residents of low-density neighbourhoods.

For all sources of physical activity combined (physically active travel, recreation, sports and domestic chores), residents of urban neighbourhoods were slightly more likely than residents of typically suburban neighbourhoods to have engaged in at least one physical activity (60% compared with 56%) (Table 1).¹⁴

The proportion of moderately active people is similar in suburban and urban neighbourhoods

Although information about participation in and average time spent on physical activities is useful and relevant, it is also interesting to know which neighbourhood type is associated with a greater probability of reaching a level of physical activity that would be "beneficial" to physical and mental health. In this study, we consider people who spent 20 minutes or more engaging in any physical activity on the diary day to be at least moderately active (See "What you should know about this study").

The difference between low-density and high-density neighbourhoods in the proportion of people considered "moderately active" was not statistically significant (Table 1). That conclusion remains the same when the effects of factors such as gender, health and household income, that influence the choice of a neighbourhood and the probability of being physically active, are held constant (Table A.2).

While residents of urban neighbourhoods are far more likely to be physically active in their day-today travels, residents of suburban neighbourhoods "catch up" when other types of physical activity (especially gardening and yard work) are taken into account. Overall, they are neither more nor less likely to have been moderately active.

Central urban neighbourhoods stand out: residents are more likely to be physically active

Some urban neighbourhoods have, to a greater extent than others, traits that should be associated with a higher level of physical activity. They are the central urban neighbourhoods.

We can identify two major types of urban (high-density) neighbourhoods: (1) central urban neighbourhoods, which are close to the city centre; and (2) peripheral urban neighbourhoods, which also have large numbers of multiple dwellings but are in the suburbs. (See "What you should know about this study" for definitions and concepts.)

GST

Table 2 Residents of central urban neighbourhoods are more physically active

Residential density					
	Hig	Medium	Low		
People doing ne	Central urban ighbourhoods †	Peripheral urban neighbourhoods			
		percentage			
Non-recreational travel by foot or bicycle	42	26*	17*	14*	
Indoor cleaning	21	27*	25*	25*	
Gardening, yard work / outdoor cleaning	2	6*	10*	11*	
Physical activity in leisure/sports	32	21*	23*	25*	
At least one type of physical activity	67	57*	56*	55*	
20 minutes or more of physical activity	61	50*	51*	51*	

[†] reference group

Note: Includes only the residents of the census metropolitan areas of Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary and Edmonton.

Source: Statistics Canada, General Social Survey, 2005.

CST Activity by neighbourhood type affects some groups more than others

Physically active travel (non-recreational) is different from other forms of physical activity in that, in most cases, its main purpose is not exercise, amusement or relaxation. Physically active travel has a specific goal (getting somewhere) without necessarily involving a conscious decision to exercise. Hence, people who are less inclined to play sports in their leisure time may benefit even more than others from living in a neighbourhood that encourages physical activity.

Overall, the proportion of residents who made at least one physically active trip was twice as high in high-density neighbourhoods as in low-density neighbourhoods. In certain groups, however, the difference between residents of more urban neighbourhoods and residents of less urban neighbourhoods was even more pronounced (Table A.3).

For example, that was the case for people with busy schedules (persons who spent at least nine hours of their day at work or at school). For those people, who do not necessarily have time to engage in active leisure, area of residence—urban or suburban—made a huge difference in physical activity. Of

those who lived in urban neighbourhoods, 26% made at least one physically active trip. The same was true for only 9%, or about three times fewer proportionally, of the ones living in typically suburban neighbourhoods.

The pattern is similar for people aged 25 to 34. While 38% of the 25-34 age group living in urban neighbourhoods made at least one physically active trip, the same was true for only 12% of young adults living in typically suburban neighbourhoods, also about three times fewer. The difference is so large that it affects the overall level of physical activity in the age group: 59% of urban dwellers in the group had at least 20 minutes of physical activity during the day, compared with 49% for those living in the suburbs.

In short, living in a typically suburban neighbourhood discourages physically active travel in general, with even stronger effects on some groups. That information may be important in campaigns to promote physical activity, particularly those aimed at getting sedentary people to do more.

 $^{^*}$ statistically significant difference from reference group at p < 0.05

In central urban neighbourhoods, that is, neighbourhoods which surround the city centre of the central municipality of a metropolitan area, the situation is very different from that in peripheral ones.

Most central urban neighbourhoods were designed before car ownership became almost universal. Therefore, higher density, mixed use and connectivity are the norm, which should promote physically active travel.

Peripheral urban neighbourhoods are different from central urban neighbourhoods not only because of their location in the metropolitan space; they often have less of a mix of residential and commercial uses, are relatively far from major public transportation routes, and are composed of curved streets that are poorly interconnected. They often have many more parking spaces than the city centre. Thus, though they are urban in terms of the type of dwellings they contain, many of them have few characteristics likely to encourage physically active travel.

To highlight the distinct nature of central urban neighbourhoods, we looked at residents of the six largest metropolitan areas (CMAs): Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary and Edmonton. Their central neighbourhoods match most closely the traits associated with physically active travel and physical activity in general. That is not necessarily the case in the smaller CMAs.¹⁵

Our study confirms that participation in physical activity is higher in central urban neighbourhoods than in other ones: peripheral urban, mixed, and suburban (low density). Sixty-one percent of residents of the central urban neighbourhoods engaged in physical activity for at least 20 minutes compared with about 50% in each of the other types of neighbourhoods, (Table 2). The difference is primarily due to the unmatched propensity of central urban residents to use physically active modes of travel. Holding

other factors such as age, gender and household income constant, the conclusions remained the same (detailed results not presented here).

However, only a small proportion of metropolitan residents live in central urban neighbourhoods. In the six large CMAs studied, only 7% of residents lived in central high-density neighbourhoods, compared with 47% in low-density neighbourhoods, 29% in medium-density neighbourhoods, and 17% in peripheral high-density neighbourhoods.

Conclusion

This is the first study to examine the differences in physical activity levels between urban and suburban parts of Canada's larger metropolitan areas.

Suburban residents are as active as urban residents. The proportion of people who engaged in physical activity for 20 minutes or more was no higher in high-density (urban) neighbourhoods than in medium-density (mixed) or low-density (suburban) neighbourhoods.

However, one population group living in urban neighbourhoods stands out: residents of the central urban neighbourhoods of Canada's largest cities. They were more likely to be moderately active, though this group represents a small fraction of the population.

Activities differ according to the type of neighbourhood. The residents of high-density neighbourhoods are twice as likely to make their routine trips on foot or by bicycle. This confirms the findings of other studies. Residents of typically suburban neighbourhoods are much more likely to get physically active by doing outdoor work (gardening, outdoor cleaning and maintenance) than those living in traditionally urban ones. That association, which seems obvious, was never explored directly in previous studies.

The proponents of "new urbanism" encourage urban planners to include in their development plans various features of traditional urban

neighbourhoods that they consider positive. Though they remain the exception, some neighbourhoods have actually been designed this way in recent years in both Canada and the United States. However, they are not numerous enough for their residents to be adequately represented in a survey such as the GSS on time use. A challenge for researchers in the future will be to compare central urban neighbourhoods, traditional suburban districts and new neighbourhoods built according to new urbanism's recommendations to determine what effect they have had on physical activity levels of their residents.



Martin Turcotte is a social sciences researcher with Social and Aboriginal Statistics Division, Statistics Canada.

- Health Canada. Retrieved August 29, 2008 from <u>www.hc-sc.gc.ca/hl-vs/</u> <u>physactiv/index-eng.php</u>
- For example, see Gilmour, H. (2006). Physically active Canadians. Health Reports, 18(3), 45-65, Statistics Canada, Catalogue no. 82-003. Ottawa: Minister of Industry.
- Frank, L. D., Saelens, B. E., Powell, K. E., and Chapman, J. E. (2007). Stepping towards causation: Do built environments or neighbourhood and travel preferences explain physical activity, driving, and obesity? Social Science & Medicine, 65(9), 1898-1914.
- 4. Frumkin, H., Frank, L., and Jackson, R. (2004). Urban Sprawl and Public Health—Designing, Planning, and Building for Healthy Communities. Washington, D.C.: Island Press.
- Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., and Saelens, B. E. (2005). Linking objectively measured physical activity with objectively measured urban form: Findings from SMARTRAQ. American Journal of Preventive Medicine, 28(2S2), 117-125.
- 6. Frumkin, H. (2002). Urban sprawl and public health. *Public Health Reports*, 117(3), 201-217.
- Saelens, B. E., Sallis, J. F., Black, J. B., and Chen, D. (2003). Neighborhoodbased differences in physical activity: an environment scale evaluation, American Journal of Public Health, 93(9), 1552-1558.

- Brownson, R. C., Boehmer, T. K., and Luke, D. A. (2005). Declining rates of physical activity in the United States: What are the contributors? Annual Review of Public Health, 26, 421-443.
- For more details on this trend, see the website www.newurbanism.org/. See also Duany, A., Plater-Zyberk, E., and Speck, J. (2001). Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. New York: North Point Press.
- Lopez, R. (2004). Urban sprawl and risk for being overweight or obese. American Journal of Public Health, 94(9), 1574-1579.
- Ross, N. A., Tremblay, S., Khan, S., Crouse, D., Tremblay, M., and Berthelot, J. (2007). Body mass index in urban Canada: neighborhood and metropolitan area effects. American Journal of Public Health, 97(3), 500-508.
- 12. For a complete bibliographic analysis, see Ewing, R., and Cevero, R. (2001). Travel and the built environment: A synthesis. Transportation Research Record, 1780, 87-114. For a more recent bibliographic analysis, see Khattak, A. J., and Rodriguez, D. (2005). Travel behaviour in neo-traditional neighbourhood developments: A case study in USA. Transportation Research Part A: Policy and Practice, 39(2005), 481-500.
- 13. Some sources have noted that people who prefer walking to driving may choose to live in urban neighbourhoods instead of suburban areas (and vice versa). This might suggest that it is not the physical characteristics of the area that influence the residents' behaviour, but rather the individual characteristics of those who decide to live there. For further explanation, see: Committee on Physical Activity, Health, Transportation, and Land Use, Transportation Research Board, and Institute of Medicine of the National Academies. (2005). Does the Built Environment Influence Physical Activity? Examining the Evidence. Transportation Research Board Special Report 282. Also see the following critique: Eid, J., Overman, H. G., Puga, D., and Turner, M. A. (2008). Fat city: Questioning the relationship between urban sprawl and obesity. Journal of Urban Economics, Elsevier, 63(2), 385-404.
- Other studies examining this criticism concluded that living in the suburbs was associated with a decrease in physically active non-recreational travel, even when preferences for walking are taken into account. For example, see Frank, L. A., Saelens, B. E., Powell, K. E., and Chapman, J. E. (2007); Handy, S. L., Cao, X., and Mokhtarian, P. L. (2006). Self-selection in the relationship between the built environment and walking. Journal of the American Planning Association, 72(1), 55-74. See also Schwanen, T., and Mokhtarian, P. L. (2005). What affects commute mode choice: neighborhood physical structure or preferences toward neighborhoods? Journal of Transport Geography, 13(1), 83-99.
- 14. On the other hand, the difference in duration of activity between residents of low-density neighbourhoods and residents of high-density neighbourhoods was not statistically significant.
- 15. When the residents from all 27 CMAs were included, the qualitative conclusions of this analysis were unchanged. However, the differences in participation were slightly smaller than those presented here.

(GST

Table A.1 Characteristics associated with participation in different types of physical activities

			People doing	***	The state of the s
	Non- recreational travel by foot or bicycle	Indoor cleaning	Gardening, yard work / outdoor cleaning	Physical activity during leisure time	20 minutes or more of physical activity
			percentage		
Total	19	25	10	24	52
Gender					
Women †	20	36	9	23	58
Men	17*	14*	11*	25*	46*
Age					
15 to 24 years old	31*	111*	2*	24	46*
25 to 34 years old	20*	25	5*	24*	50
35 to 44 years old †	16	28	9	21	50
45 to 54 years old	14	26	12*	24	51
55 to 64 years old	14	30	15*	25*	54
65 to 74 years old	12*	34*	22*	32*	65*
75 years and older	18	35*	16*	28*	63*
Immigrant status					
Non-immigrant †	19	25	10	25	52
Immigrant (before 1990)	15*	29*	13*	27	55*
Recent immigrant (1990 to 2005)	22	21*	6*	21*	49
Health status					
Excellent	19	22*	9	31*	55
Very good †	19	25	10	25	52
Good	18	26	10	22*	51
Fair or poor	17	27	10	19*	48*
Highest level of educational attainment	,,	27	10		10
No high school diploma	22	25	11*	23*	55
High school diploma	17*	24	9	22*	50
College diploma or trade certificate	17*	27	11*	24*	52
University degree †	20	25	9	28	52
Household income	20	2.3	/	20	32
Less than \$20,000	30*	32*	7*	23	61*
\$20,000 to \$39,999	21*	27	9*	21*	52
\$40,000 to \$59,999	16	28*	10	25	
					52
\$60,000 to \$99,999 †	16	25	11	26	54
\$100,000 and more	18	21*	11	27	49*
Presence of a child 4 years or less	10	0.4	7.0	0.5	50
No †	19	24	10	25	52
Yes	18	35*	5*	20*	53
Presence of a child of 5 to 12 years					
No †	18	24	10	25	52
Yes	18	24	10	25	52
Day of the week					
Weekday †	20	24	9	24	51
Weekend	14*	29*	12*	25	55*
Time constraint due to work/education					
0 minutes †	16	36	15	30	64
1 to 419 minutes (less than 7 hours)	28*	24*	8*	22*	54*
420 to 539 minutes (from 7 to nearly 9 hours)	20*	16*	5*	21*	42*
540 minutes and more (9 hours and up)	16	10*	4*	15*	31*

[†] reference group

statistically significant difference from reference group at p < 0.05

Source: Statistics Canada, General Social Survey, 2005.

GST Table A.2 Logistical regression of factors associated with participation in different types of physical activity

	People doing					
	Non- recreational travel by foot or bicycle	Indoor cleaning	Gardening, yard work / outdoor cleaning	Physical activity during leisure time	20 minutes or more of physical activit	
			odds ratio			
Type of neighbourhood						
Urban	2.6*	0.9	0.4*	1.0	1.1	
Mixed	1.3*	1.0	0.8*	1.0	1.0	
Suburban †	1.0	1.0	1.0	1.0	1.0	
Gender						
Women †	1.0	1.0	1.0	1.0	1.0	
Men	0.9*	0.3*	1.5*	1.2*	0.7*	
Age						
15 to 24 years old	2.5*	0.4*	0.2*	1.4*	0.9	
25 to 34 years old	1.2*	0.9	0.5*	1.2*	1.0	
35 to 44 years old †	1.0	1.0	1.0	1.0	1.0	
45 to 54 years old	0.8	1.0	1.2	1.1	1.0	
55 to 64 years old	0.8	1.0	1.3	1.0	0.9	
65 to 74 years old	0.6*	0.9	1.8*	1.4*	1.1	
75 years and older	1.0	0.9	1.3	1.1	1.0	
Immigrant status	1.0	0.7	1.0	1.1	1.0	
Non-immigrant †	1.0	1.0	1.0	1.0	1.0	
Immigrant (before 1990)	0.9	1.1	0.9	1.1	1.1	
Recent immigrant (1990 to 2005)	0.9	0.8*	1.0	1.0	1.0	
Health status	0.7	0.0	1.0	1.0	1.0	
Excellent	1.0	0.9	1.0	1.4*	1.2*	
Very good †	1.0	1.0	1.0	1.0	1.0	
Good	1.0	1.1	1.0	0.8*	0.9	
	0.9	0.8*	0.8	0.7*	0.7*	
Fair or poor	0.7	0.0	0.0	0.7	0.7	
Highest level of educational attainment	1.0	1.0	1.0	10	1.0	
No high school diploma	1.0	1.0	1.0	1.0	1.0 0.9	
High school diploma	0.8*	1.0	0.9		0.9	
College diplomo or trade certificate	0 9	1.0	0.9	1.2		
University degree †	1.2	1.0	0.8	1.4*	1.0	
Household income	1 7*	1 1	0.5*	0.0	1.0	
Less than \$20,000	1.7*	1.1	0.5*	0.8	1.0	
\$20,000 to \$39,999	1.3*	1.0	0.7*	0.8*	0.8*	
\$40,000 to \$59,999	1.0	1.1	0.9	1.0	0.9	
\$60,000 to \$99,999 †	1.0	1.0	1.0	1.0	1.0	
\$100,000 and more	1.2	0.9	1.0	1.0	0.9*	
Presence of a child 4 years or less		1.0		7.0	1.0	
No †	1.0	1.0	1.0	1.0	1.0	
Yes	0.9	1.7*	0.6*	0.7*	1.0	
Presence of a child of 5 to 12 years	1.0	1.0	2.0			
No †	1.0	1.0	1.0	1.0	1.0	
Yes	1.1	1.2*	0.9	1.0	1.1	
Day of the week						
Weekday †	1.0	1.0	1.0	1.0	1.0	
Weekend	0.6*	0.9	0.9	0.7*	0.7*	
Time constraint due to work/education	0.98*	0.87*	0.87*	0.90*	0.87*	

[†] reference group

Source: Statistics Canada, General Social Survey, 2005.

statistically significant difference from reference group at p < 0.05

GST

Table A.3 Interaction between the type of physical activity, the type of neighbourhood and socio-economic variables

People having done at least...

			reopie naving	done al least.	•			
		One active trip			20 minutes of physical activity			
	Res	sidential dens	sity	Residential density				
	High	Low †		High	Low †			
	perce	entage	ratio	perce	entage	rati		
Gender								
Women	31*	15	2.1	57	57	1.0		
Men	28*	14	2.1	49	46	1.		
Age								
15 to 24 years	39*	28	1.4	47	45	}.		
25 to 34 years	38*	12	3.1	59*	49	1.		
35 to 44 years	28*	11	2.5	48	50	1.		
45 to 54 years	23*	11	2.0	49	51	1.		
55 to 64 years	25*	12	2.1	54	54	1.		
65 to 74 years	22*	10	2.3	64	64	1.		
75 years and older	22	15	1.5	58	68	0.		
Immigrant status								
Non-immigrant	31*	15	2.1	54	51	1.		
Immigrant (before 1990)	28*	10	2.6	56	56	1.		
Recent immigrant (1990 to 2005)	30*	16	1.8	50	49	1.		
Health status								
Excellent	35*	14	2.4	59	54	1.		
Very good	31*	15	2.1	52	53	1.		
Good	28*	15	1.9	54	51	1.		
Fair or poor	28*	11	2.6	49	47	1.		
Highest level of educational attainment								
No high school diploma	28*	19	1.5	55	54	1.		
High school diploma	29*	13	2.3	52	48	1.		
College diploma or trade certificate	29*	12	2.4	52	54	1.		
University degree †	34*	15	2.3	55	52	1.		
Household income								
Less than \$ 20,000	41*	20	2.0	62	61	1.		
\$20,000 to \$39,999	31*	13	2.4	54	52	1.		
\$40,000 to \$59,999	27*	13	2.1	57	53	1.		
\$60,000 to \$99,999	29*	12	2.5	55	54	1.		
\$100,000 and more	31*	15	2.1	50	49	1.		
Presence of a child of 4 years or less	01	13	2.1	30	.,	, .		
No	30*	14	2.1	53	52	1.		
Yes	26*	14	1.9	54	53	1.		
Presence of a child of 5 to 12 years	20	- ''	1.7	J1	30			
No	30*	14	2.2	53	52	1.		
Yes	31*	16	2.0	56	52	1.		
Day of the week	JI	10	2.0	30	JL	1.		
Weekday	31*	16	2.0	52	50	1.		
Weekend Weekend	27*	11	2.6	56	56	1.		
Time constraint due to work/education	LI		2.0	30	30	1.		
O minutes	28*	13	2.1	63	65	1.		
	41*	25	1.7	58	54	1.		
1 to 419 minutes (less than 7 hours)	33*	16	2.1	20 44	42			
420 to 539 minutes (from 7 to nearly 9 hours)	26*		2.1		29	1		
540 minutes and more (9 hours and up)	26	9	2.7	34	29	1.5		

[†] reference group

 $[^]st$ statistically significant difference from reference group at p < 0.05

Source: Statistics Canada, General Social Survey, 2005.

Going on vacation: Benefits sought from pleasure travel

by Susan Crompton with Leslie-Anne Keown

as average incomes rose and as cars and planes made distances shrink, the vacation or pleasure trip became attainable for people from almost all walks of life.

With over three in four Canadian adults taking even a brief holiday,² pleasure travel has become a large and important industry. Canadians spend tens of billions of dollars within Canada itself and billions more in other countries.³ This spending generates government revenues that are also in the billions, primarily from sales, employment and business taxes.⁴

In the last year or so, though, the tourism industry has faltered and conditions are not expected to improve in 2009.⁵ A poll of Canadian consumer spending intentions, conducted in December 2008, identified vacation spending as the second most common cost-cutting measure in 2009.⁶ Meanwhile, the term "stay-cation" was coined to describe the increasing tendency of people to take their vacations at home.⁷

Nevertheless, it's not certain that these intentions will be acted upon. Several decades of tourism research generally conclude that the benefits people expect to derive from their travel experience are better predictors of their travel behaviour than their

income or other socio-demographic characteristics.^{8,9} People travel for pleasure because they want to escape the everyday, to feel rejuvenated, to acquire status and prestige, to socialize, to learn something, or just to enjoy the scenery.¹⁰ And these benefits of pleasure can be much more powerful motivators to people than affordability alone.

While these benefits have been identified in earlier studies, this article adds to the discussion by quantifying the value of these benefits. By measuring their magnitude on an eight-point index, we can compare the value of a given benefit to different kinds of travellers; we can also compare the value of one benefit relative to another. In addition, since many people take vacation or pleasure trips for multiple reasons, we are able to identify correlated travel benefits and discuss them as pairs, rather than as separate items. Ultimately, we hope that these findings will be useful to the Canadian tourism industry.

Using data from the 2006 Travel and Activity Motivation Survey, this article examines the three most popular benefits of vacation or pleasure travel: rest and relaxation (R&R index); nurturing family and friendship ties (family-and-friends index); and learning and discovery (discovery index). The study population is restricted to travellers aged 25 and over who live in a family with children under 18, in a couple, or

on their own. (See "What you should know about this study" for concepts and definitions.)

Why do Canadians travel for pleasure?

Canadian travellers look for three principal types of benefits when they go on a vacation or pleasure trip. The first benefit is simply rest-andrelaxation (R&R index): the traveller's main objective is to get a break from their daily environment, to relax and relieve stress, and to have no fixed schedule. On an index of 0 to 8. where 6.0 or over is defined as "highly important," the overall average score on the benefits index for rest-andrelaxation is 6.2. R&R has the highest average score of all three benefits because almost two-thirds of adult travellers said that, for them, this was a highly important benefit of a pleasure trip (Chart 1).

The second type of benefit involves nurturing family and friendship ties (family-and-friends index). In this case, a key goal of the trip is to keep family ties alive, to enrich the traveller's relationship with their spouse and children, to create lasting memories, and to renew personal connections with people other than family. The overall average score on the index for family-and-friends is 5.2 out of 8.0 points, with almost half of adult travellers reporting that this is a highly important benefit of pleasure travel.

ST What you should know about this study

Data in this study were drawn from the 2006 Travel Activities and Motivation Survey (TAMS). TAMS was conducted by Statistics Canada on behalf of the Canadian Tourism Commission, three federal agencies and nine provincial and territorial agencies and departments responsible for tourism. Travellers were defined as persons answering that they had taken an out-of-town trip of one or more nights in the twoyear period preceding the survey.

This article is based on a sample of about 15,500 respondents to TAMS representing over 11.3 million Canadian travellers aged 25 and over. This study population comprises travellers who live in a family with children under 18, live with a spouse or partner only, or live alone. Travellers are restricted to adults aged 25 and over since they are more likely than younger adults to be making the key decisions about pleasure travel such as where to go and what to spend. About 3,000 respondents, representing just over 3.6 million travellers, who were living with children aged 18 and over, or with anyone outside the immediate nuclear family (e.g. grandparents, in-laws, or other relatives) are also excluded because it is impossible to reasonably assume that these family members travel together, making the effect of family structure on travel motivations and behaviour difficult to interpret.

Definitions

Travellers: persons aged 25 and older who had taken an out-of-town vacation or pleasure trip of one or more nights in the past two years.

Family structure: the study population comprises travellers living in four basic family types.

Living with a spouse/partner and child (or children) under age 18 living at home. Also referred to as husband-wife family with children.

Living with a child (or children) under age 18 living at home. Also referred to as a lone-parent family.

Living in a couple, living with a spouse or partner only.

Living alone. Referred to as solo.

Preliminary analysis showed that age is a primary factor dictating the likelihood of travelling for pleasure, so we separated the solo and couple family types into two age groups—25 to 54 years, and 55 years and older. Travellers with children are not sub-divided by age because over 97% of them were between 25 and 54 years old.

Travel benefits

Respondents were asked about 15 specific benefits of travel, which they were asked to rate as 0 "of no importance", 1 "somewhat important" or 2 "highly important." Following the procedure established in the travel literature, 1,2,3 we conducted a factor analysis to identify those specific benefits that were most closely related and could be grouped together into general themes. Based on the results, we were able to collapse 11 of the 15 questions into the three travel benefits indices described below:4

Rest-and-relaxation (R&R): get a break from your day-to-day environment; relax and relieve stress; have a life with no fixed schedule (to do what I want, when I want).

Family-and-friendship ties (Family-and-friends): to keep family ties alive; to enrich your relationships with your spouse, partner and/or children; to create lasting memories; to renew personal connections with people other than family.

Learning-and-discovery (Discovery): to see or do something new and different; to gain knowledge of history, other cultures or other places; to enrich your perspective on life; to stimulate your mind or be intellectually challenged.

The model

We used linear regression models with the benefit index as the dependent variable. Coefficients were estimated through a weighted regression that used the TAMS survey weights, with variance estimation done through survey bootstrapping. Coefficients are unstandardized; statistical significance was calculated at p < 0.01 (99% confidence). Variables in the models include travellers' socio-demographic and economic characteristics, as well as a set of destination determinants. See Table 1 for a complete list of variables in the models.

For readers wanting a practical application of the model results, the coefficients may be interpreted in an additive fashion as shown in the following example. Begin with the base score for the travel index and then add the required variables. Thus, we can add up: base score for family-and-friends index (3.36) for a woman (0.19) with spouse and children under 18 (1.05) and household income of \$60,000 to \$99,999 (-0.03) having high school education (0.00) and a full-time paid job (-0.11), who also scores over 6.0 on the rest-and-relaxation index (0.61) and also rates as highly important destination attributes that there are lots of activities for the kids (0.62), the language and/or culture is familiar (0.16) and it feels

CST What you should know about this study (continued)

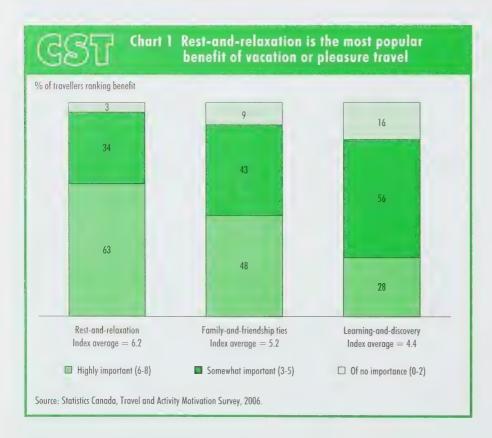
safe (0.30). Total score on the family-and-friends travel benefits index for this hypothetical individual is 6.15.

Data limitations

Due to the way the data were collected by TAMS, we cannot identify the duration of pleasure trips taken; for instance, we cannot distinguish a three-week trip to Europe from an overnight camping trip. Also, although we know where respondents travelled for pleasure during the two-year survey period, we cannot identify the destination of any one particular trip. These limitations mean that we cannot match travel benefits to specific destinations or to different types of trips, and therefore cannot determine, for example, whether R&R trips tend to be longer vacations taken abroad and trips to nurture family and friendship ties are shorter visits made mainly in Canada.

Notes

- 1. Gitelson, R. J., and Kerstetter, D. L. (1990). The relationship between sociodemographic variables, benefits sought and subsequent vacation behavior: A case study. *Journal of Travel Research*, 28(3), 24-29.
- 2 Heung, V. C. S., Qu, H., and Chu, R. (2001). The relationship between vacation factors and socio-demographic and traveling characteristics: the case of Japanese leisure travellers. *Tourism Management*, 22(3), 259-269.
- Moscardo, G., Morrison, A. M., Pearce, P.L., Lang, C-T., and O'Leary, J. T. (1996). Understanding vacation destination choice through travel motivation and activities. *Journal of Vacation Marketing*, 2(2), 109-122.
- 4 The four questions that did not fit into any benefits category were: to seek solitude or isolation; to have stories to share/something interesting to talk about; to be physically challenged/physically energized; to be pampered.



The third type of travel benefit is learning-and-discovery (discovery index). Travellers look forward to seeing or doing something new and

different, learning about history or other cultures and places, enriching their perspective on life, and stimulating their intellect. This benefit is highly important to just over one quarter of travellers, making its overall average score of 4.4 fairly low compared to the other two benefits indices.

It is certainly possible to seek more than one benefit from the same pleasure or vacation trip, and undoubtedly many travellers have multiple purposes. 11 There is a mildto-moderate positive correlation between the benefits indices of family-and-friendship ties and rest-and-relaxation; that is, as the importance of family-and-friends increases, so does the importance of R&R. There is also a positive link between family and friendship ties and learning-and-discovery, but no association between discovery and R&R (Chart 2).

We will follow up on these correlations and discuss family-and-friends and R&R together as a pair of travel benefits. We will then examine adults who describe learning-and-discovery as a key benefit of their vacation or pleasure travel plans.

Family-and-friends and restand-relaxation: For some it's a pair, for others it's a trade-off Canadian travellers aged 25 and over consider rest-and-relaxation to be an important benefit of taking a vacation or pleasure trip. Maintaining and strengthening family and friendship ties is also reported to be an important benefit of taking a pleasure trip.

Nevertheless, the benefits of having some unstructured time for rest and relaxation are more valuable to some travellers than others; exactly the same may be said of the benefits of nurturing family and social networks. On a basic level, we would expect people's preferences—expressed as scores on each benefit index—to be influenced by their socio-demographic characteristics such as age, family structure and education. ^{12,13,14}

Family structure provides the clearest example of the different choices made by travellers with different backgrounds. Simply put, when travellers with children at home

go on a vacation or pleasure trip, they want both more bonding with family and friends and more rest and relaxation than other travellers. They have a score of 5.6 on the family-and-friendship index, and a score of 6.6 to 6.7 on the rest-and-relaxation index (depending on marital status). In contrast, travellers who live alone place much less value on the travel benefits of family-and-friends, while travellers who are in their mid-50s or older are less motivated by R&R (Chart 3, Table A.1).

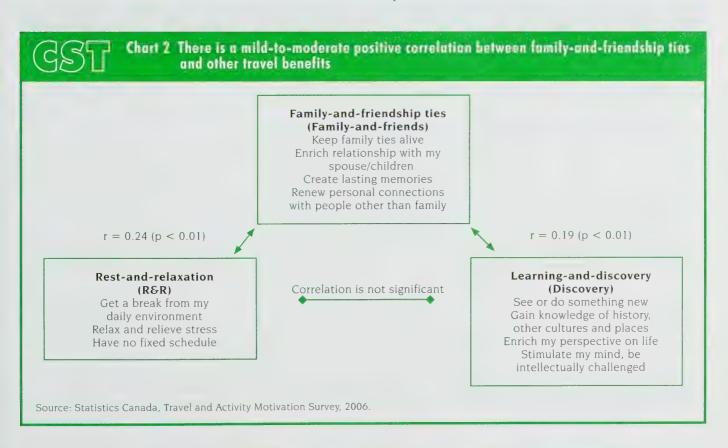
When women go on a pleasure trip, they reported wanting more in terms of family-and-friendship ties than men (5.3 compared to 5.0) although they also reported that they expect just as much in the way of rest-and-relaxation.

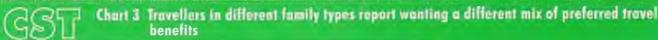
Travellers who work full time have a significantly higher-than-average score on the benefits index for R&R (6.5), while their interest in nurturing family-and-friendship ties on holiday is about average (5.1). Part-time workers have average scores for both the R&R and family-and-friends

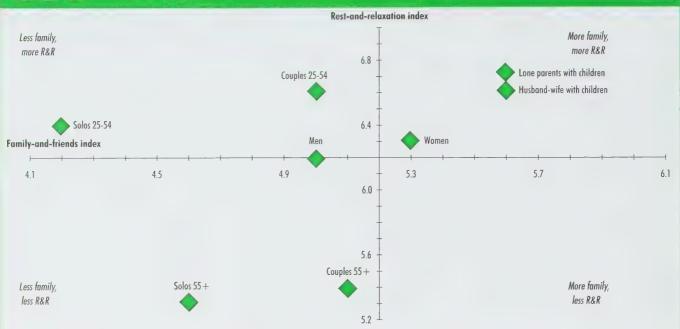
indices (6.2 and 5.3, respectively). Meanwhile, travellers who are not employed (e.g. homemakers, students) rank the travel benefits of family-and-friends higher than travellers in the paid workforce (Chart 4, Table A.1).

Children influence family-andfriends and work status affects R&R

Clearly, a traveller's demographic and socio-economic characteristics overlap: for example, does a young mother have a higher score on the family ties index because she is a woman or because she has children. And is it her family or her work status that makes her value the R&R aspects of a vacation or a week-end away from home. In order to isolate individual factors from the overlapping effects of other variables, we ran multiple regression models. This allows us to estimate the influence of different characteristics on the benefits scores of Canadian travellers. (See "What you should know about this study" for more information about the models.)

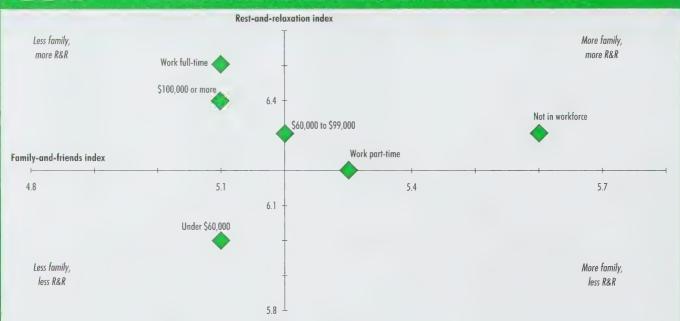






Note: Axes cross at the overall average score for the index, Family-and-friends = 5.2, R&R = 6.2. For measures of significance across both indices for each data point, see Table A.1. Source: Statistics Canada, Travel and Activity Motivation Survey, 2006.





Notes: Axes cross at the overall average score for the index, Family-and-friends = 5.2, R&R = 6.2. Retired travellers not shown to maintain scale integrity. For measures of significance, see Table A.1. Source: Statistics Canada, Travel and Activity Motivation Survey, 2006.

Results of the models show that family structure has the most important impact on family-and-friendship scores, even when the influence of other variables is controlled for. Compared with solo travellers, travellers with children score about 1.0 point higher on the index, and travellers in couples about 0.8 points higher, regardless of their age (Table 1, Model 1).

Travellers with children also consider the benefits of rest-and-relaxation to be more important than older travellers do, after taking account of other factors in the model. This result confirms the findings of previous studies, which have identified lower interest in R&R among older travellers, partly because they are more likely to seek out discovery benefits while on a vacation or pleasure trip.^{15,16}

The clearest preference for rest-and-relaxation is shown by travellers who have paid employment. Compared to retirees, travellers who work full time score 1.0 point higher on the R&R index, and part-time workers score almost as high (Table 1, Model 2). Non-retirees outside the workforce, such as homemakers and students, who do not work for pay but nevertheless have daily obligations, also had significantly higher scores on the R&R index than retirees, even when other variables like sex, age and family structure are taken into account. In contrast, work status has no influence on the scores for family-and-friendship ties.

Since the travel benefits of familyand-friends and R&R are moderately correlated, each benefit still has a significant influence on the scores of the other, even when other factors are controlled for. Travellers who describe rest-and-relaxation as a "highly important" travel benefit score 0.6 points higher on the family-and-friends index. Similarly, reporting that nurturing family and friendship ties is "highly important" also increases a traveller's R&R score by almost 0.6 points, compared with those who do not consider it to be so important.

CST

Table 1 Family structure has the most important effect on scores for travel benefits of family-and-friendship ties, even after controlling for other factors

S	Family-and- friendship	Rest-and- relaxation	Learning-and- discovery
	Model 1	Model 2	Model 3
	Es	timated coeffici	ents
Base score (when all variables are held constant)	3.36	4.91	3.97
Sex			
Men†	0.00	0.00	0.00
Women	0.19*	0.10*	0.16*
Family structure			
Solo aged 25 to 54 †	0.00	0.00	0.00
Solo aged 55 and over	0.21	-0.63*	0.13
Couple aged 25 to 54	0.79*	0.05	-0.38*
Couple aged 55 and over	0.80*	-0.58*	-0.32*
Husband-wife family with child(ren) under 18	1.05*	-0.13	-0.62*
Lone-parent family with child(ren) under 18	1.04*	0.02	-0.58*
Household income			
Household income under \$60,000 †	0.00	0.00	0.00
\$60,000 to \$99,999	-0.03	0.01	0.02
\$100,000 or more	-0.11	0.10	-0.04
Refused, not stated	0.09	-0.04	-0.10
Highest level of education			
High school diploma or some postsecondary education	n † 0.00	0.00	0.00
Diploma or certificate from a college or trade school	0.00	0.04	0.08
University degree	-0.06	-0.27*	0.75*
Main activity during previous 12 months			
Retired †	0.00	0.00	0.00
Full-time paid work	-0.11	1.06*	-0.07
Part-time paid work	-0.08	0.68*	-0.11
Other (includes homemaker; student, etc.)	0.02	0.76*	0.01
Other travel benefits sought that are highl	y important to	me (score 6.0 or	more) ††
Rest-and-relaxation	0.61*		
Family-and-friendship ties		0.58*	0.68*
When choosing a destination [] is highly	y important to r	ne (score 6.0 or	more) ††
Having lots of activities for children	0.62*	-0.05	-0.44*
Having lots of activities for adults	0.31*	0.25*	0.92*
Friends or relatives live there	0.81*	-0.50*	-0.48*
Being very different from home	0.15*	-0.10	1.34*
Knowing the language and/or culture	0.16*	0.15*	-0.42*
Feeling safe	0.30*	0.34*	-0.07
No health concerns	0.15*	0.19*	0.04
An affordable travel package	0.06	0.33*	0.01
Adjusted R-squared	0.17	0.18	0.19

[.] not applicable

Note: R-squared is a statistical measure of how well a regression line approximates real data points. It ranges between 0 and 1.

Source: Statistics Canada, Travel and Activity Motivation Survey, 2006.

[†] reference group for the category

^{††} reference group for each category is "[Variable name] is not highly important," e.g. "Rest-and-relaxation is not highly important to me"

 $^{^{*}}$ statistically significant difference from reference group at p < 0.01

Women continue to express a greater interest than men in the travel benefits of family-and-friends, even after controlling for other factors such as family structure and work status. Since women generally consider it their role to build and hold together the family's social networks, ¹⁷ they might be expected to rank these elements of a vacation or pleasure trip higher than men.

Level of education has a significant effect on attitudes to R&R, but not on family ties. Travellers with a university degree score almost 0.3 points lower on the R&R index than travellers with high school or some postsecondary, even when other factors like age are taken into account.

Finally, the models show that household income has no effect on either R&R or family-and-friends as an explicit benefit of travel for pleasure. This result is unexpected, given the findings of previous studies. 18,19 Most probably, our result is an artifact of the TAMS definition of travel (an out-of-town trip for at least one night), which included most survey respondents at almost all income levels. Income may very well be a significant factor for pleasure travel of longer duration or greater distance, which we cannot identify (see "What you should know about this study" for data limitations).

The benefits people want dictate the qualities they look for in a destination

The benefits people seek from a vacation or pleasure trip are driven by more than their socio-demographic characteristics. Because pleasure travel entails going out-of-town, travellers choose a destination that they expect to provide the benefits they seek. ^{20,21,22} For instance, if R&R is the primary benefit sought, we might expect travellers to go to a place that is "comfortable" so they won't be required to deal with the unfamiliar.

Travellers who rank higher than average on the rest-and-relaxation benefits index want to go where there

will be lots of fun activities for the children. They also prefer to choose a place where they feel safe and they know the language or culture (Chart 5, Table A.1).

To travellers who score above average on the family-and-friends index, entertaining the kids is also of primary importance. Not surprisingly, friends or family live at their preferred destination.

When we examine the effect of each destination determinant on both travel indices, we can identify three determinants that have a positive effect on scores, even when other factors are taken into account. Travellers score 0.3 points higher on both indices if they report that safety is highly important to them when choosing a destination. Similarly, both scores are somewhat higher for travellers who say that activities for adults are highly important and for those who do not want to worry about health issues (Table 1, Models 1 and 2).

Travellers score 0.8 points higher on the family-and-friendship index when it is highly important that friends or family members are living at their chosen destination. This determinant has the opposite effect on the R&R index, where a traveller's score drops by 0.5 points. And while an affordable travel package can raise scores by 0.3 points on the R&R index, it has no effect at all on the family-and-friends index, once all other factors are controlled for.

Learning-and-discovery: It's all about adventure

About 28% of adult Canadian travellers report that learning and discovery is a highly important benefit of their pleasure travel: they want to see or do new things, learn about other cultures and places, and be intellectually challenged (Chart 1). Statistically, there is a somewhat moderate positive correlation between the benefits indices for learning-and-discovery and family-and-friends (Chart 2). But in many respects, travellers who place a high

premium on discovery are the inverse of those who strongly value family and friendship ties.

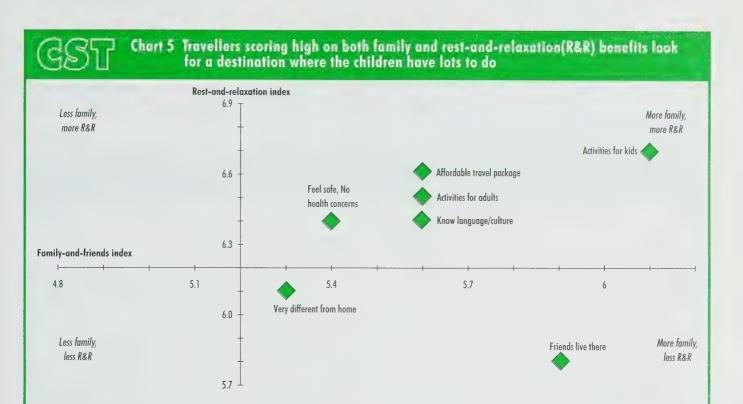
Higher-than-average scores on the discovery index are posted by university-educated travellers and by solo travellers who live alone; in contrast, those with less education and travellers with children score significantly below average. Somewhat unexpectedly, scores do not differ across income groups or across work status (Chart 6, Table A.1).

After controlling for the effects of other variables, travellers with a university degree are still bigger fans of discovery benefits than those with high school or some postsecondary, scoring more than 0.7 points higher on the index. It is possible that travellers with higher education developed the habit of inquiry at university and remain "lifelong learners"; it is also possible that social norms require the highlyeducated to travel to "expand their horizons," and that people tend to conform to that expectation²³ (Table 1, Model 3).

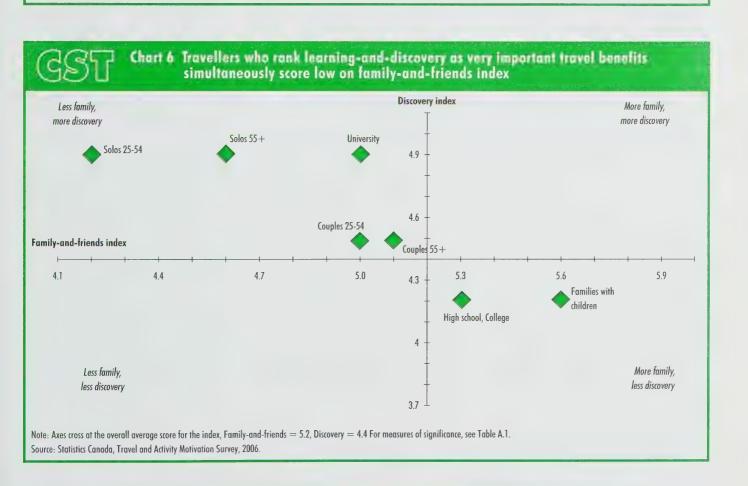
Family structure remains an important factor, since without children's needs to consider, travellers can focus on the benefits they prefer. When all other variables including education are taken into account, travellers living alone or in a couple have significantly higher discovery scores than travellers living with children (Table 1).

The influence of destination on benefits scores, though, is greater than the traveller's sociodemographic characteristics alone. Far and away the most important factor is the desire for novelty. Travellers who are explicitly looking for something new and different score over 1.3 points higher than those who are not. And those who want lots of adult activities also have significantly higher scores on the discovery index, once all other variables in the model are controlled for.

As expected, travellers do not post high marks on the discovery index if they are looking for an



Note: Axes cross at the overall average score for the index, Family-and-friends = 5.2, R&R = 6.2. For measures of significance, see Table A.1.



Source: Statistics Canada, Travel and Activity Motivation Survey, 2006.

experience within their "comfort zone," for example, to feel safe, to know the language or culture at their destination, or to have friends or family living there. Nevertheless, travellers score almost 0.7 points higher if they rank nurturing family and friendship ties as a "highly important" travel benefit. This finding may reflect the probability that these travellers share their adventure with a spouse or a friend.

Summary

People take a vacation or pleasure trip in the expectation of deriving certain benefits from their experience. Getting away from their daily routine is a highly important benefit for almost two-thirds of adult travellers, while almost half say that maintaining social and family ties is of primary importance to them. Discovering something new about the world or themselves is a key objective for just over one-quarter of Canadian adults who go on a vacation or pleasure trip.

There is a moderate positive correlation between the travel benefits of rest-and-relaxation and those of family-and-friendship ties; that is, people seeking to escape their everyday routines are also likely to be looking for ways to strengthen their social relationships. In this pair of benefits, though, R&R always has priority.

Travellers who score above average on these two indices share some common characteristics. They are generally under 55 and often have children at home. They prefer destinations that are comfortable for them, perhaps even predictable: a place where they feel safe, with lots of things to do and see for children and for adults. Travellers with high restand-relaxation scores are also looking for a destination that offers an affordable travel package; travellers with high scores on the family-andfriends index want a destination that presents no health concerns. Some choose a destination where people they know live nearby.

There is also a positive correlation between the learning-and-discovery and family-and-friends indices. However, travellers who highly value the discovery benefits of travel can be quite different than others. Travellers who actively seek new experiences or challenges when they take a vacation or pleasure trip generally do not have children under 18 at home, and are more likely to have a university degree. They report wanting to see a place that is special, probably somewhere they have never been before, and where they can participate in more adult-oriented activities.

Finally, once other factors like family structure and destination attributes are taken into account, work status is significant only for travellers looking for rest-and-relaxation, and education plays a role only among travellers who want intellectual discovery. The results of the regression models show that household income has no effect on any of the benefits scores, but this finding should be interpreted with caution.

GST

Susan Crompton and **Leslie-Anne Keown** are senior analysts with *Canadian Social Trends*.

- Heung, V. C. S., Qu, H., and Chu, R. (2001). The relationship between vacation factors and socio-demographic and traveling characteristics: the case of Japanese leisure travellers. Tourism Management, 22(3), 259-269.
- About 79% of Canadians aged 25 and over —more than 18.4 million—spent at least one night out-of-town on a pleasure or vacation trip between 2004 and 2006. Statistics Canada, 2006. Travel and Activity Motivation Survey (TAMS), custom tabulation.
- In the third quarter of 2008, Canadians spent \$15.1 billion on tourism within Canada; in the year 2007, they spent \$26.7 billion in other countries.

- Statistics Canada. (2009). National Tourism Indicators, Quarterly Estimates, Third quarter 2008. Catalogue no. 13-009-XWE. Ottawa: Minister of Industry; and Statistics Canada (2008). International Travel 2007. Catalogue no. 66-201-X. Ottawa: Minister of Industry.
- 4. Estimated revenues for all three levels of government were estimated to reach more than \$19.7 billion in 2007, mostly from sales taxes on products and services and from income taxes on employment and business taxes. Statistics Canada. (2008). Government revenue attributable to tourism. The Daily, November 12, 2008.
- 5. Statistics Canada. (2009).
- The primary target for cost-cutting was spending on restaurants and fast food. Wells, J. (2009, January 2). The Canadian consumer: Handle with care. The Globe and Mail, p. A1.
- 7. Harris, M. (2008, December 17). Tight money means more 'staycations.' The Ottawa Citizen, p. D1.
- 8. Sarigöllü, E., and Huang, R. (2005). Benefits segmentation of visitors to Latin America. Journal of Travel Research, 43(3), 277-293.
- Loker, L. E., and Perdue, R. R. (1992).
 A Benefit-based segmentation of a non-resident summer travel market. *Journal of Travel Research*, 31(1), 30-35.
- Gitelson, R. J., and Kerstetter, D. L. (1990). The relationship between sociodemographic variables, benefits sought and subsequent vacation behavior: A case study. Journal of Travel Research, 28(3), 24-29
- 11. Gitelson and Kerstetter. (1990).
- 12. Heung, Qu, and Chu. (2001).
- Moscardo, G., Morrison, A. M., Pearce, P. L., Lang, C-T., and O'Leary, J. T. (1996). Understanding vacation destination choice through travel motivation and activities. Journal of Vacation Marketing, 2(2), 109-122.
- 14. Gitelson and Kerstetter. (1990).
- 15. Moscardo, Morrison, Pearce, Lang, and O'Leary. (1996).
- 16. Gitelson and Kerstetter. (1990).
- 17. Maushart, S. (2001). Wifework: What marriage really means for women. London: Bloomsbury.
- Shoemaker, S. (1994). Segmenting the U.S. travel market according to benefits realized. Journal of Travel Research, 32(3), 8-21.

- 21. Moscardo, Morrison, Pearce, Lang, and 23. Pitts, R. E., and Woodside, A. G. (1986). O'Leary (1996).
- 22. Gitelson and Kerstetter. (1990).
- Personal values and travel decisions. Journal of Travel Research, 25(1), 20-

Table A.1 Average values for travel benefits indices, by selected characteristics

Renefits Index (Min = 0.0 Max = 8.0)

	Benefits Index (Min = 0.0, Max = 8.0)			
	Family-and- friendship	Rest-and- relaxation	Learning-and- discovery	
		average score		
Total (Overall average) †	5.2	6.2	4.4	
Men	5.0*	6.2	4.3	
Women	5.3*	6.3	4.5	
Family structure				
Solo aged 25 to 54	4.2*	6.4	4.9*	
Solo aged 55 and over	4.6*	5.3*	4.9*	
Couple aged 25 to 54	5.0	6.6*	4.5	
Couple aged 55 and over	5.1	5.4*	4.5	
Husband-wife family with child(ren) under 18 at home	5.6*	6.6*	4.2*	
Lone-parent family with child(ren) under 18 at home	5.6*	6.7*	4.2	
Household income				
Under \$60,000	5.1	6.0	4.4	
\$60,000 to \$99,999	5.2	6.3	4.4	
\$100,000 and over	5.1	6.4	4.5	
Refused, not stated	5.3*	6.2	4.3	
Highest level of education				
High school diploma or some postsecondary education	5.3	6.2	4.2*	
Diploma or certificate from a college or trade school	5.3	6.5*	4.2*	
University degree	5.0	6.1	4.9*	
Main activity during previous 12 months				
Retired	5.0	5.1*	4.6	
Full-time paid work	5.1	6.5*	4.4	
Part-time paid work	5.3	6.2	4.4	
Other (includes homemaker, student, etc.)	5.6*	6.3	4.5	
Other travel benefits sought that are highly important to				
Family-and-friendship ties		6.6*	4.7*	
Rest-and-relaxation	5.5*		4.4	
Learning-and-discovery	5.6*	6.2		
When choosing my destination is highly important to				
Having lots of activities for children	6.1*	6.7*	4.4	
Having lots of activities for adults	5.6*	6.5*	5.0*	
Friends or relatives live there	5.9*	5.8*	4.1*	
Being very different from home	5.3	6.1	6.0*	
Knowing the language and/or culture	5.6*	6.4	4.2*	
Feeling safe	5.4*	6.4*	4.4	
No health concerns	5.4*	6.4*	4.9	
An affordable travel package	5.6*	6.6*	4.5	
z pomago				

^{...} not applicable

Source: Statistics Canada, Travel and Activity Motivation Survey, 2006.

reference group (overall average)

statistically significant difference from reference group (overall average) at p < 0.01

First Nations people: Selected findings of the 2006 Census

by Linda Gionet

As part of its contribution to the dissemination of Census findings, Canadian Social Trends is highlighting some of the key social trends observed in the 2006 Census.

In this issue, we present adaptations from the following Census analytical documents: Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census (Catalogue no. 97-558-XWE2006001); Educational Portrait of Canada, 2006 Census: Findings (Catalogue no. 97-560-XWE2006001); and Canada's Changing Labour Force, 2006 Census (Catalogue no. 97-559-XWE2006001), as well as Census data on income, housing affordability and home ownership.

irst Nations people represent a large and diverse population. They number 698,025¹ individuals and comprise 60% of over one million people who identified themselves as an Aboriginal person in the 2006 Census. (See "What you should know about this study" for terms and definitions.)

First Nations people account for 2.2% of the total Canadian population and they are growing at a rapid rate. Between 1996 and 2006, the First Nations population grew by 29%.² This rate was 3.5 times more than the 8% growth rate recorded by the non-Aboriginal population in Canada. Several factors account for the rapid growth, such as high birth rates and an increase in the number of individuals who are now identifying themselves as a First Nations person (North American Indian).³

A large proportion of the population who reported that they were First Nations people also said that they were Registered or Treaty

Indians.⁴ In the 2006 Census, 81% of First Nations people were Registered Indians.

Among First Nations people living off reserve, 68% were Registered Indians while 32% did not have Registered Indian status. Nearly all of First Nations people living on reserve were Registered Indians (98%).

This article highlights where First Nations people live, their age structure, children's living arrangements, the ability to speak an Aboriginal language, postsecondary education, employment and unemployment, income, and housing conditions (including housing affordability and home ownership).

Majority of First Nations people live in Ontario and Western provinces

Together, Ontario and the Western provinces were home to an estimated 577,300 First Nations people, or four-fifths (83%) of all First Nations people in Canada (Table 1).

The 2006 Census enumerated 158,395 First Nations people (23%) in Ontario; 129,580 (19%) in British Columbia; 100,645 (14%) in Manitoba; 97,275 (14%) in Alberta; and 91,400 (13%) in Saskatchewan.

Although a quarter of the First Nations population lived in Ontario, they represented 1.4% of the total population of that province.⁵ In contrast, First Nations people comprised a larger percentage of the total population in regions such as the Northwest Territories (31%), Yukon (21%) and Saskatchewan (10%).

In 2006, 45% of First Nations people lived in urban areas. (Urban areas include large cities, or census metropolitan areas, and smaller urban centres.)

The five census metropolitan areas (CMAs) with the largest number of First Nations people were Winnipeg (25,900), Vancouver (23,515), Edmonton (22,440), Toronto (17,275) and Saskatoon (11,510).

Table 1 Size of the First Nations population, Canada, provinces and territories, 2006

ovinces and territories	Distribution (200
	percentage
Canada	100
Newfoundland and Labrador	1.1
Prince Edward Island	0.2
Nova Scotia	2.2
New Brunswick	1.8
Quebec	9.3
Ontario	22.7
Manitoba	14.4
Saskatchewan	13.1
Alberta	13.9
British Columbia	18.6
Yukon Territory	0.9
Northwest Territories	1.8
Nunavut	0

First Nations people are a youthful population

The age structure of the First Nations population in Canada was decidedly young in 2006. The median age of First Nations people was 25 years, while that of the non-Aboriginal population was 40 years. (Median age is the point where exactly one-half of the population is older and the other half is younger.)

Source: Statistics Canada, Census of Population, 2006

About a third of the First Nations population was made up of children under age 15, while only 5% were seniors aged 65 and over. Lower life expectancy, in addition to higher fertility rates, underlies this youthful age structure.⁶

Across Canada, the median age of First Nations people living on reserve (23 years) was lower than for those living off reserve (26 years). Moreover, children under age 15 represented 34% of First Nations people living on reserve and 31% of First Nations people living off reserve.

The median age of 26 years was the same for off-reserve First Nations people with and without Registered Indian status in 2006.

The First Nations population was youngest in Saskatchewan

(median age 20 years) and Manitoba (21 years).⁷ The oldest populations were living in Newfoundland and Labrador (33 years) and Quebec (30 years).

Living arrangements for First Nations children differ from non-Aboriginal population

Compared with the non-Aboriginal population, First Nations children (14 years of age and under) were more likely to live with a lone parent, grandparent or other relative. In 2006, 37% of First Nations children lived with a lone parent, 8% lived with a grandparent or other relative. This compares with 17% of non-Aboriginal children who lived with a lone parent and less than 1% who lived with a grandparent or other relative.

About a third of First Nations children living on reserve resided with a lone parent in 2006. The percentage was higher for First Nations children living off reserve at 41%. Among those living off reserve, First Nations children with Registered Indian status were more likely than those without Registered Indian status to reside with a lone parent (44% versus 35%).

The likelihood of living with a grandparent or another relative was highest for First Nations children with Registered Indian status living off-reserve. In 2006, 10% of these children lived with relatives other than a parent, compared with 7% of First Nations children living on reserve and 6% of off-reserve First Nations children without Registered Indian status.

Over half of First Nations people living on reserve can speak an Aboriginal language

The census recorded over 60 different languages spoken by First Nations people in Canada. The First Nations languages with the largest number of speakers in 2006 were Cree (87,285), Ojibway (30,255), Oji-Cree (12,435) and Montagnais-Naskapi (11,080).

In both 2001 and 2006, 29% of First Nations people said that they could speak an Aboriginal language well enough to carry on a conversation.

This figure, however, was much higher for First Nations people living on reserve. In 2006, half of the First Nations people living on reserve (51%) could speak in an Aboriginal language compared with 12% of those living off-reserve.

Off-reserve First Nations people with Registered Indian status were more likely than those without Registered Indian status to be able to carry on a conversation in a First Nations language (17% versus 2%).

Two out of five First Nations adults (aged 25 to 64) have a postsecondary education

In 2006, 42% of First Nations people (25 to 64 years old) had completed a postsecondary education compared with 61% of the non-Aboriginal population in this age group (Chart 1). (The term postsecondary education refers to educational attainment above the level of secondary (high school) completion. See "What you should know about this study" for a more detailed explanation of the term postsecondary education.)

GST What you should know about this study

Comparing Aboriginal census data over time

Some Indian reserves and settlements did not participate in the census as enumeration was not permitted, or it was interrupted before completion. In 2006, there were 22 incompletely enumerated Indian reserves, compared to 30 in 2001 and 77 in 1996.

Most of the people living on incompletely enumerated Indian reserves and settlements have Registered Indian status. Consequently, the impact of incomplete enumeration will be greatest on data for First Nations people registered under the Indian Act.

Only the Indian reserves and settlements that participated in both censuses are included when comparing data for two census years.

Defining the Aboriginal population

There are different ways to identify the Aboriginal population based on four questions asked in the census (Aboriginal identity; member of an Indian Band/First Nation; Registered or Treaty Indian; and ethnic origin, including Aboriginal ancestries) depending on the focus and the requirements of the data user.

For the purposes of this article, two concepts are used: Aboriginal identity population, and Registered or Treaty Indian (See Definitions of terms section below).

Separate data are presented for First Nations people living on and off reserve as well as by Registered Indian status for the off-reserve population.

For more information, see *How Statistics Canada Identifies* Aboriginal Peoples: http://www.statcan.gc.ca/pub/12-592-x/12-592-x2007001-eng.htm

Definition of terms

Aboriginal identity population: Aboriginal identity refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada, and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): is an area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgement of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or were self-employed or worked without pay in a family farm, business or professional practice. Includes those absent from their workplace due to vacation, illness, work disruption or other reason.

Employment rate: The employment rate for a particular group (age, sex, marital status, geographic area, etc.) is the number of persons employed in the week (Sunday to Saturday) prior to Census Day (May 16, 2006), expressed as a percentage of the total population, in that particular group.

Family: a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex. "Children" in a census family includes children living with their grandparent(s) with no parents present.

First Nations people: persons reporting a single response of "North American Indian" to the Aboriginal identity question. Although respondents self-identified as "North American Indian" on the census, the term "First Nations people" is used in this article. Both single and multiple responses to the Aboriginal identity question are possible, however, only the population reporting a single response of "North American Indian" is included.

Housing affordability: the share of household income spent on shelter costs, whereby a threshold of 30% is the upper limit for defining affordable housing, as defined by Canada Mortgage and Housing Corporation. Those who spend above the threshold may do so by choice, or they may be at risk of experiencing problems related to housing affordability. The data related to housing affordability does not include households living on reserve or on farms.

Income: refers to the total money income received from various sources during calendar year 2005 by persons 15 years of age and over. For a list of total income sources, please

ST What you should know about this study (continued)

refer to the 2006 Census Dictionary. http://www12.statcan. ca/english/census06/reference/dictionary/pop020a.cfm

Indian Act: The Indian Act sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources. Please refer to "Registered Indians" below for more information regarding the Indian Act.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.

On-reserve population: The 'on-reserve' population is defined according to criteria established by Indian and Northern Affairs Canada (INAC). For a detailed definition, please refer to the 2006 Census Dictionary: http://www12. statcan.ca/english/census06/reference/dictionary/geo012a. cfm

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Registered or Treaty Indians (Status Indians): Registered Indians are people who are entitled to have their names included on the Indian Register, an official list maintained by the federal government. Certain criteria determine who can be registered as a Status Indian. Only Status Indians are recognized as Indians under the Indian Act, which defines an Indian as "a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian." Status Indians are entitled to certain rights and benefits under the law.1

For more information, including the inheritance rules regarding the passing of Registered Indian status from parents to children, see the Indian and Northern Affairs Canada website at: http://www.ainc-inac.gc.ca/pr/pub/wf/index E.html

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and were available for work, and were looking for employment, were on temporary lay-off, or expected to start work within 4 weeks.

Unemployment rate: The unemployment rate for a particular group (age, sex, marital status, geographic area, etc.) is the unemployed in that group, expressed as a percentage of the labour force in that group, in the week (Sunday to Saturday) prior to Census Day (May 16, 2006).

Urban areas: have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

Note

1. Indian and Northern Affairs Canada. (2004). Words First: An Evolving Terminology Relating to Aboriginal Peoples in Canada, Catalogue no. QS-6181-010-BB-A1. Ottawa, p. 11.

While about the same share of First Nations and non-Aboriginal people had a trades certificate (12% and 13% respectively), First Nations people were less likely to have a university degree or a college diploma. For example, 7% of First Nations people had a university degree, compared with 23% of non-Aboriginal people; 17% of First Nations people had a college diploma, compared with 20% of non-Aboriginal people.

Among First Nations people living on reserve, 35% had completed a postsecondary education. This was

lower than the figure for off-reserve First Nations people (46%), regardless of Registered Indian Status. While off-reserve First Nations people were more likely to have a university degree or college diploma, the share with a trades certificate was about the same for people living on (13%) and off reserve (14%).

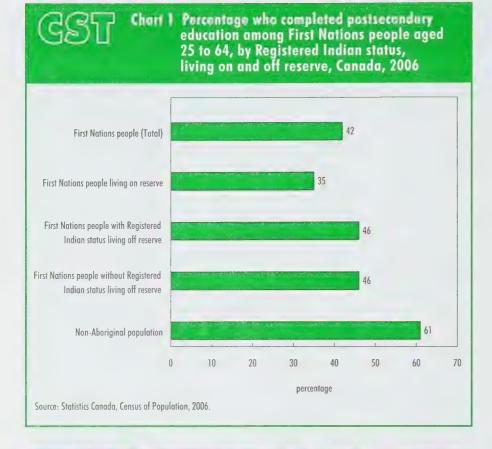
Overall, First Nations women aged 25 to 64 were more likely to have completed a postsecondary education than First Nations men in this age group (44% versus 39%). This remained the case regardless of

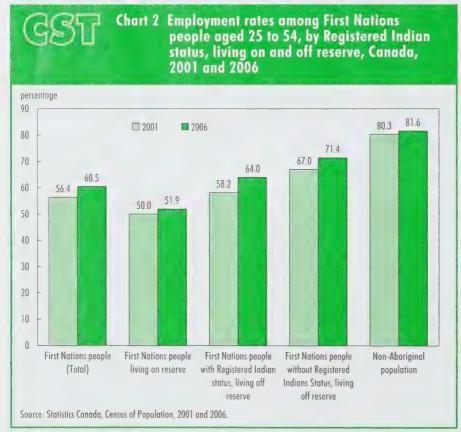
whether they lived on or off reserve or had Registered Indian status.

The gap, however, was the narrowest at 2 percentage points between off-reserve First Nations women and men (47% versus 45%), who were without Registered Indian status.

Employment rates

In 2006, 60.5% of First Nations people of core working age (25 to 54 years) were employed. Although this was lower than the employment rate for the non-Aboriginal population





(81.6%), it represented an increase of about 4 percentage points over 2001 (Chart 2).

Employment rates (the proportion of the population 25 to 54 who are employed) were lower for First Nations people living on reserve. In 2006, First Nations people living on reserve had an employment rate of 51.9% compared to 66.3% off reserve.

Among First Nations people living off reserve, people without Registered Indian status (71.4%) had higher rates of employment than people with Registered Indian status (64.0%).

In 2006, 51.9% of First Nations people living on reserve were employed, compared with 50.0% in 2001. In contrast, employment rates rose considerably for First Nations people living off reserve. For example, 64.0% of off-reserve First Nations people without Registered status were employed in 2006, up from 58.2% five years earlier.

The gap in employment rates between First Nations men and women was widest for people with Registered Indian status living off reserve. Within this group, the employment rates were 70.4% for men and 59.3% for women.

Unemployment rates estimate the proportion of people in the labour force who do not have a job and are looking for work. In 2006, the unemployment rate among First Nations people aged 25 to 54 living on reserve was 23.1% unemployed. By comparison, 12.3% of First Nations people living off reserve and 5.2% of non-Aboriginal people were unemployed.

Among First Nations people living off reserve, unemployment rates for people with Registered Indian status was 13.7% in 2006 compared to 9.4% of people without Registered Indian status.

In terms of the unemployment situation of First Nations men and women, First Nations men living on reserve had an unemployment rate of 27.1% compared to 18.5% for women. Among those living off reserve, First

Nations men and women had similar rates of unemployment.

Median income low for First Nations people

In 2005, the median annual income of the First Nations people aged 15 and over in Canada was lower than that of the non-Aboriginal population. (Median income is the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.)

The median income of First Nations people in 2005 was \$14,517, about \$11,000 lower than the figure for the non-Aboriginal population (\$25,955). This gap was similar in 2000; both groups experienced an increase in median income of approximately \$800° between 2000 and 2005.

Overall, First Nations people living on reserve had a lower median income (\$11,224) than those living off reserve (\$17,464). Off-reserve First Nations people with Registered Indian status had a similar median income to people without Registered Indian status (\$16,771 versus \$18,969).

Among those living off reserve, the gap between median incomes of First Nations men and women was wider for people without Registered Indian status. In 2005, the median income of off-reserve First Nations men without Registered Indian status (\$23,221) was \$6,537 higher than that of their female counterparts (\$16,684). The median income of off-reserve First Nations men with Registered status (\$18,732) was \$2,764 higher than that of women (\$15,968).

Housing affordability

The housing affordability indicator refers to the proportion of household income spent on shelter. A commonly-used benchmark is spending 30% or more of before-tax income on rent or mortgage payments plus utilities. ¹⁰

In 2006, three in ten off-reserve First Nations people in the provinces lived in households spending 30% or more of their household income on shelter costs.¹¹ This was down from 35% in 2001, but still higher than the 21% for the non-Aboriginal population. There was little difference in housing affordability between off-reserve First Nations people with and without Registered Indian status (31% and 30% respectively).

Home ownership

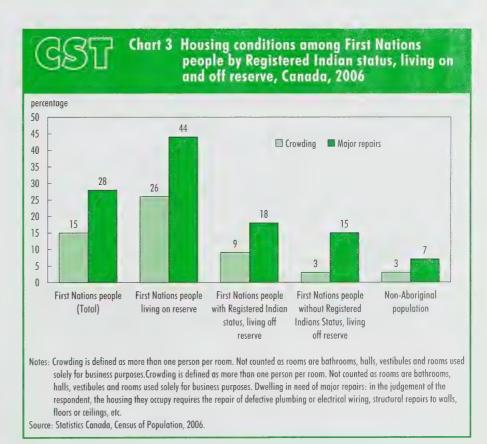
About 45% of First Nations people living off reserve were in dwellings owned by a member of the household, compared with 75% of the non-Aboriginal population. The level of home ownership for the First Nations population, living off reserve, in 2006 was 4 percentage points higher than in 2001.

Off-reserve First Nations people with Registered Indian status had lower home ownership levels (41%) than First Nations people without Registered Indian status (55%).

First Nations people more likely to live in crowded homes and homes needing major repairs

In 2006, First Nations people were five times more likely than non-Aboriginal people to live in crowded homes—15% versus 3%. Nonetheless, First Nations people experienced a decrease in crowding of 5 percentage points since 1996 (Chart 3). (Crowding is defined as more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.)

The highest rate of crowding was reported among First Nations people living on reserve (26%). Overall, this was nearly four times higher than the rate of crowding for First Nations people living off reserve (7%). Offreserve First Nations people with Registered Indian status were slightly more likely than people without Registered Indian status to live in a crowded home (9% versus 3%).



The quality of one's living conditions is also reflected by the state of repair of one's home. In 2006, 28% of First Nations people lived in homes that needed major repairs versus 7% of the non-Aboriginal population. (The need for major repairs was in the judgement of the respondent.)

Of First Nations people living on reserve, 44% reported having a dwelling in need of major repairs, up from 36% in 1996.

Living off reserve, the need for major repairs was similar for those with or without Registered Indian status (18% versus 15%).

Summary

First Nations people are a young and rapidly growing population that mostly lives in Ontario and the Western provinces. A large proportion of First Nations people reported that they had Registered Indian status. Compared with the non-Aboriginal population, First Nations children were more likely to live with a lone parent, grandparent or other relatives. A higher percentage of First Nations people living on reserve could converse in an Aboriginal language than those living off reserve. Two out of five First Nations adults (aged 25 to 64) have a postsecondary education. Although the employment rate and median income of First Nations adults (aged 25 to 54) were higher for those living off reserve, they remained lower than the non-Aboriginal population. First Nations people living on reserve were more likely to report having crowded homes and those needing major repairs.



Linda Gionet is an analyst with the Aboriginal Statistics program, Social and Aboriginal Statistics Division, Statistics Canada.

- Note on rounding: Due to the nature of random rounding, counts may vary slightly between different census products.
- Only the Indian reserves and settlements that participated in both censuses are included when comparing data for two census years.
- According to Guimond, "Ethnic mobility is also the principal component to the recent demographic explosion of North American Indian and Métis populations. Failure to consider ethnic mobility in the analysis of Aboriginal populations would preclude proper understanding of the fuzziness of definitions, multiplication of estimates, and recent population growth." Guimond, E. (2003). Fuzzy definitions and population explosion: changing identities of aboriginal groups in Canada. In D. Newhouse and E. Peters (Eds.), Not strangers in these parts: Urban aboriginal peoples. Catalogue no. DS-3986. Ottawa: Policy Research Initiative, p.45.
- See "What you should know about this study" for a definition of the term Registered Indian status.
- 5 It should be noted that 17 of the 22 incompletely enumerated Indian reserves in 2006 were located in Ontario and in Quebec. Of the remainder, three were in Alberta, one was in Saskatchewan and one in British Columbia.
- Statistics Canada. (2005). Projections of the Aboriginal Populations, Canada, Provinces and Territories, Catalogue no. 91-547-XIE. Ottawa: Minister of Industry, p. 25.
- In Saskatchewan, First Nations people without Registered Indian status living off reserve (3,985 people) had a median age of 18 years.
- 8. Less than one percent of First Nations people lived with non-relatives (with no relatives present). This was the case for those living on reserve or off reserve, regardless of Registered Indian status.

- All dollar amounts from the 2001 Census have been adjusted for inflation and are reported in constant 2005 dollars.
- 10. According to Canada Mortgage and Housing Corporation (CMHC), a benchmark for determining housing affordability is when the share of household income spent on shelter costs (rent or mortgage payments plus utilities) is 30% or more of before-tax income. It should be noted that not all households spending 30% or more of incomes on shelter costs are necessarily experiencing housing affordability problems. This is particularly true of households with high incomes. There are also other households who choose to spend more on shelter than on other goods. Nevertheless, the allocation of 30% or more of a household's income to housing expenses provides a useful benchmark for assessing trends in housing affordability.

The relatively high shelter cost to household income ratios for some households may have resulted from the difference in the reference period for shelter cost and household income data. The reference period for shelter cost data (gross rent for tenants, and owner's major payments for owners) is 2006, while household income is reported for the year 2005. As well, for some households, the 2005 household income may represent income for only part of a year.

- 11. The housing affordability indicator was not used in the territories or for people living on reserve. The unique housing situations in these regions do not easily conform to the indicator's parameters for housing affordability.
- 12. Home ownership rates were not used for people living on reserve. The unique housing situation on reserve may not be comparable to dwellings off reserve.



tatistics Canada's Canadian Economic Observer (CEO) delivers the most thorough, monthly economic briefing available. Each month as a subscriber you receive current and reliable information to help you stay abreast of the economic performance of the country, your province and the specific economic sectors in which you're interested.

CEO is presented in two parts:

CEO—The Magazine

- Sector-by-sector analysis of economic indicators
- Developments in provincial and international economies
- Highlights of economic events in Canada and around the world
- A summary table of current economic conditions
- Feature articles spotlighting major issues and industry sectors

CEO—The Statistical Summary

- Detailed figures in tabular form on markets, prices, industrial sectors, international and domestic trade, and much more
- More than 1,100 economic indicators covering: market sectors, imports, exports, demographics, unemployment, and much more
- User-friendly tables and graphs

What's in a typical issue?

Statistical charts and tables are blended with expert commentary to provide a quick, concise, wide-ranging overview of the economy.

CEO now available in a free electronic format

Enjoy the complete print edition in an electronic format (PDF/HTML). Visit our website at **www.statcan.gc.ca** to download it today!

Your annual subscription to the CEO print version includes:

- 12 issues of *Canadian Economic Observer*, your source for the latest trends, analyses and data on Canada's economy.
- A FREE edition of CEO's Annual Historical Supplement—a factfilled compendium, putting at your fingertips the economic trends that have characterized Canada's development from as far back as 1926 right up to the present... all in one easy-to-use volume.

Subscribe to the Canadian Economic Observer

Canadian Economic Observer

(Cat. No. 11-010-XPB)

Order 1 year subscription: \$243.00

Order 2 year subscription: \$388.80 Save 20%

Order 3 year subscription: \$510.30 Save 30%

www.statcan.gc.ca

Visit our website

Use one of three convenient ways to order: CALL Toll-free 1-800-267-6677

CALL Toll-free 1-800-267-6677 FAX Toll-free 1-877-287-4369 E-MAIL infostats@statcan.gc.ca

Print version: In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. For shipments to the United States, please add \$6 per issue or item ordered. For shipments to other countries, please add \$10 per issue or item ordered. (Federal government clients must indicate their IS Organization Code and IS Reference Code on all orders.)

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of Canadian Social Trends explores the social realities that we are dealing with **now**.

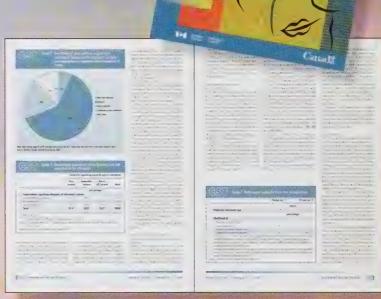
... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



la Freye

Take advantage of this opportunity today!

Subscribe now by using any one of the following methods:
Call toll-free 1-800-267-6677
Fax toll-free 1-877-287-4369
E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the free online version of Canadian Social Trends.

JANA DIAN SOLA MENS

Special Edition

Selected findings from 2006:

Aboriginal Children's Survey

First Nations people

Métis in Canada

Inuit in Canada

Catalogue no.11-008





Statistics Canada Statistique Canada Canada

How to REACHUS

Editorial Office

E-mail:

cstsc@statcan.gc.ca

⁺Fax: Write: 613-951-0387 Editor-in-Chief.

Canadian Social Trends

Statistics Canada

7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario

K1A 0T6

For service to subscribers

E-mail:

infostats@statcan.gc.ca

Phone:

1-800-267-6677

Fax:

1-877-287-4369

Write:

Statistics Canada, Finance,

6-H R.H. Coats Building

150 Tunney's Pasture Driveway

Ottawa, Ontario

K1A 0T6

How to order Statistics Canada publications

E-mail:

infostats@statcan.gc.ca

Phone:

1-800-267-6677

Fax:

1-877-287-4369

http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE Online:

Need more information about Statistics Canada products?

E-mail:

infostats@statcan.qc.ca

Phone:

1-800-263-1136

Online:

www.statcan.gc.ca TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Special Edition 2009

CST

Editor-in-Chief

Margaret Michalowski

Senior English Editors

Susan Crompton Karen Watson

Senior French Editor

Marie-Paule Robert

Production Manager

Monique Poirier

Production Assistant

Christine Bizier

Creative Services

Carol Noël Jennifer Pfitzer

Publishing Specialists

Lyne Bélanger Chantal Chalifoux

Canadian Social Trends

June 2009

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2009

All rights reserved. This product cannot be reproduced and/or transmitted to any person or organization outside of the licensee's organization. Reasonable rights of use of the content of this product are granted solely for personal, corporate or public policy research, or for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from this product. These materials are solely for non-commercial purposes. In such cases, the source of the data must be acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, users shall seek prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Indexed in the Academic ASAP, Academic Search Elite, Canadian Periodical Index, Canadian Serials, Expanded Academic ASAP, PAIS International, Periodical Abstracts, Periodical Abstracts Research II, ProQuest 5000, Proquest Research Library and available on-line in the Canadian Business and Current Affairs Database.

ISSN 0831-5698 (Print) ISSN 1481-1634 (Electronic)



2 Selected findings of the Aboriginal Children's Survey 2006: Family and Community

by Vivian O'Donnell

10 First Nations people: Selected findings of the 2006 Census

by Linda Gionet

18 Métis in Canada: Selected Findings of the 2006 Census

by Linda Gionet

23 Inuit in Canada: Selected findings of the 2006 Census

by Linda Gionet

Selected findings of the Aboriginal Children's Survey 2006: Family and Community

by Vivian O'Donnell

This article has been adapted from Aboriginal Children's Survey 2006: Family, Community and Child Care (Statistics Canada Catalogue no. 89-634-X). It is available free online at: www.statcan.gc.ca/bsolc/olc-cel/catno=89-634-x&lang=eng.

"Children hold a special place in Aboriginal cultures. According to tradition, they are gifts from the spirit world They carry within them the gifts that manifest themselves as they become teachers, mothers, hunters, councilors, artisans and visionaries. They renew the strength of the family, clan and village and make the elders young again with their joyful presence." (Royal Commission on Aboriginal Peoples, 1996)

he Aboriginal population is growing at a rate that outpaces that of the rest of the Canadian population. Aboriginal children account for a growing proportion of all children in Canada, particularly in some western provinces and in the Territories. According to the 2006 Census, there were approximately 7,000 Inuit, 35,000 Métis and 47,000 off-reserve First Nations children under the age of 6 across Canada.¹

This brief analysis is designed to offer a starting point to understanding the circumstances under which Aboriginal children are living and growing.

First Nations children living off reserve

Family

In 2006, the Census enumerated about 47,000 First Nations children under the age of 6 years living off reserve in Canada.² The majority (78%) of these

children lived in urban areas, with 46% in census metropolitan areas (CMAs) and 32% in smaller urban centres.³ The remaining 22% were living in rural areas. About two-thirds (67%) of First Nations children living off reserve were Registered or Treaty Indians. (See "What you should know about this study" for a discussion of Registered Indian status.)

While large families are becoming less common in Canada, this is not the case for some First Nations families living off reserve. About 17% of young First Nations children were living in families with four or more children, compared to 8% of non-Aboriginal children. Among offreserve First Nations children, those with registered Indian status were almost twice as likely to live in big families (20%), compared to those without registered status (12%).

According to the 2006 Census, 52% of off-reserve First Nations children were living with two parents, 41% in

lone parent households, about 8% in multiple-generation households (children, parents and grandparents) and 2% were living with their grandparents only (without parents present).

The parent or guardian responded to the Aboriginal Children's Survey (ACS). For the majority of First Nations children (89%), this person was the birth mother or father. The remaining 11% included grandparents (4%), foster parents (3%), and adoptive parents (2%).

According to the 2006 ACS, parents/guardians of 90% of First Nations children reported that many people were involved in raising the child. Mothers were most commonly involved (93% of children) followed by fathers (72%) and grandparents (44%). More than one-quarter (28%) of First Nations children had relatives (such as siblings, cousins, aunts and uncles) who were playing a part in raising them (Table 1).

GST What you should know about this study

The Aboriginal Children's Survey

The Aboriginal Children's Survey (ACS) provides an extensive set of data about Aboriginal (Métis, Inuit, and off-reserve First Nations) children under 6 years of age in urban, rural, and northern locations across Canada. The survey was developed by Statistics Canada and Aboriginal advisors from across the country and was conducted jointly with Human Resources and Social Development Canada between October 2006 and March 2007.

The ACS was designed to provide a picture of the early development of Aboriginal children and the social and living conditions in which they are learning and growing.

The focus of this analytical article is First Nations children living off reserve, Métis children, and Inuit children. It is based on information provided by parents or guardians of about 10,500 Aboriginal children under 6 years of age.

The ACS is a post-censal survey, that is, the sample was selected from children living in private households whose response on their 2006 Census questionnaire indicated that they: (1) had Aboriginal ancestors and/or; (2) identified as North American Indian and/or Métis and/or Inuit and/or; (3) had treaty or registered Indian status and/or; (4) had Band membership.

The Aboriginal identity definition is used in this report. For the ACS, children were identified by parents/guardians as North American Indian and/or Métis and/or Inuit. The term "First Nations children" is used throughout this report to refer to those children living off reserve who were identified as North American Indian.

It was possible to report both single and multiple responses to the Aboriginal identity question on the ACS (approximately 3% of children in the Aboriginal identity population of the ACS were identified with more than one group). In this article, data represent a combination of both the single and multiple Aboriginal identity populations. As an example, the Métis data tables include those who were

identified as Métis only and those identified as Métis in combination with another Aboriginal group (for example, Métis and North American Indian).

Where Census data is used in this article, the single response Aboriginal identity population is used. Less than 1% of Aboriginal children under the age of 6 were identified as belonging to more than one Aboriginal group on the 2006 Census.

More detailed information about the survey is available in the *ACS Concepts and Methods Guide* (catalogue no. 89-634-X 2008006).

Registered Indian status

Not every individual who identifies as a First Nations person is a treaty or registered Indian. According to the 2006 Census, 67% of children under the age of 6 years old living off reserve who were identified as First Nations children were also treaty or registered Indians (31,425 children). The remaining 33% were not treaty or registered Indians (15,680).

Registered Indians or "status Indians" are people who are entitled to have their names included on the Indian Register, an official list maintained by the federal government. Certain criteria determine who can be registered as a status Indian. Only registered Indians are recognized as Indians under the Indian Act, which defines an Indian as 'a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian.'

Status Indians are entitled to certain rights and benefits under the law. Generally speaking, treaty Indians are persons who are registered under the *Indian Act* and can prove descent from a band that signed a treaty. Differences in findings for these two groups are included throughout this article.

For more information, including the inheritance rules regarding the passing of registered Indian status from parents to children, see the Indian and Northern Affairs Canada website at: http://www.ainc-inac.gc.ca/pr/pub/wf/index E.html

When the 2006 ACS asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," it was reported that children were most likely to receive focused attention at least

once a day from their mothers (93%), followed by siblings (69%), fathers (64%) and grandparents (27%). Most also received focused attention from their extended family at least once a week: 67% from grandparents, 55% from aunts and uncles, and 45% from cousins.

Daily life and community

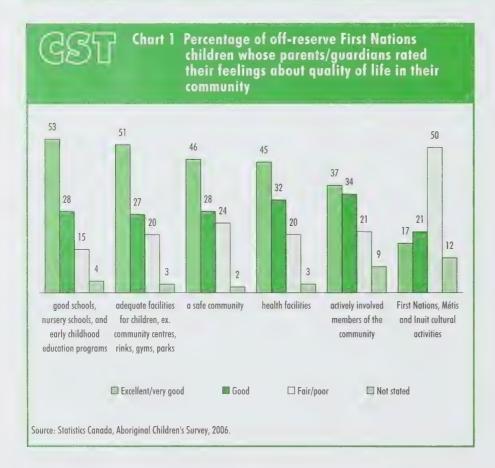
The ACS asked parents/guardians to rate their feelings regarding five aspects of their home and daily life. The vast majority reported being "very satisfied" or "satisfied" with their social support network, main job or

		st Nations children liv	ige 6, 2006
-	Total	With registered Indian status †	Without registered
		percentage	
Mother	93	93	94
Father	72	68	78*
Grandparents	44	45	43
Other relatives (aunt, uncle, cousin, sibling)	28	31	24*
Other ¹	17	16	18



- st Statistically significant difference from reference group at p < 0.05.
- 1. Includes child care provider/teacher, other relatives not already specified and non-relatives.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.



activity, and the way they spend their free time. They were least satisfied with their finances and housing.

Nearly half (49%) of off-reserve First Nations children under age 6 were in low-income families, compared with 18% of non-Aboriginal children. Of these low-income First Nations children, 38% had parents/guardians who were "dissatisfied" or "very dissatisfied" with their finances. The proportion was 19% for those who were not in low-income families. Similarly, dissatisfaction with housing

was over twice as high for those living in low-income families than for those not in low-income families (22% versus 9%).

About half of off-reserve First Nations children lived in a community rated by their parent/guardians as "excellent" or "very good" in terms of schools, nursery schools and early childhood education programs (53%), adequate facilities for children (51%), as a safe community (46%) and a place with health facilities (45%) (Chart 1).

Many young First Nations children living off reserve are growing up in communities where Aboriginal people represent a small minority among a diversity of cultures. In many of these communities, it is likely more difficult to maintain ties to traditional Aboriginal cultures than in communities where Aboriginal people represent the majority of the population. In 2006, 17% of young First Nations children were living in a community rated as "excellent" or "very good" in terms of being a place with First Nations, Métis and Inuit cultural activities.

Almost half (46%) of young First Nations children living off-reserve had participated in or attended traditional First Nations, Métis, or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies. Just as many (45%) had taken part in hunting, fishing, trapping or camping. About 30% had also participated in traditional seasonal activities such as gathering goose eggs or wild plants, for example berries, sweet grass, roots or wild rice. Children in rural areas were more likely to have taken part in these traditional and cultural activities than children living in urban areas (Table 2).

In 2006, 45% of off-reserve First Nations children had someone who helped them to understand First Nations history and culture. This figure was higher for children with registered Indian status (54%) than for those without status (32%). Of those who had someone involved in helping them understand their history

Table 2 Participation of off-reserve First Nations children under age 6 in selected traditional activities, 2006

First Nations children living off reserve who...

ype of traditional activities	Total	Urban †	Rural
		percentage	
Participated in or attended traditional First Nations, Métis or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies	46	46	47
Took part in hunting, fishing, trapping or camping Participated in seasonal activities, such as gathering goose eggs or wild plants (for example, berries, sweet grass roots or wild rice)	45 30	41 26	58* 40*

† Reference group.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Table 3 Persons involved in raising Métis children under age 6, 2006	
elationship to the child	Métis childre
	percentage
Mother	94
Father	78
Grandparents	41
Other relatives (aunt, uncle, cousin, sibling)	21
Other ¹	17

or culture, 60% were being taught by their parents, 50% by grandparents, and 20% by aunts and uncles. About 14% of First Nations children living off reserve who had someone to help them understand their culture were also learning from their teachers or child care providers.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Métis children

Family

In 2006, the Census enumerated about 35,000 Métis children under the age of 6 in Canada. The majority (89%) of young Métis children were in the provinces of Alberta, Manitoba, Ontario, Saskatchewan

and British Columbia. A relatively large proportion of Métis children were growing up in rural areas, with 27% of young Métis children living in rural areas compared to 18% of non-Aboriginal children. Another 41% of Métis children were living in census metropolitan areas and the remaining 32% in smaller urban centres.

About one-third (32%) of young Métis children were living in families with three or more children, compared to 25% of non-Aboriginal children. (When considering families with four or more children, the percentages are more similar, at 11% for young Métis and 8% for non-Aboriginal children.)

A larger proportion of Métis children in rural areas (39%) were living in families with three or more children, compared to Métis children in urban areas (30%).

According to the 2006 Census, 67% of Métis children were living with two parents, 30% were in lone parent households, 7% were in multiplegeneration households (children, parents and grandparents) and 1% were living with their grandparents only. Living in lone parent households was more common among children in urban (33%) than rural communities (22%).

In the 2006 ACS, the parents/guardians of most Métis children (91%) reported that many people were involved in raising the child. Mothers were most often involved (94%) followed by fathers (78%) and grandparents (41%). About one-fifth (21%) of Métis children had relatives (such as siblings, cousins, aunts and uncles) who were playing a part in raising them (Table 3).

When asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," parents/guardians reported that Métis children were most likely to receive focused attention at least once a day from their mothers (94%), followed by fathers (71%), siblings (70%) and grandparents (24%). At least once a week, 69% of Métis children received focused attention from grandparents, 51% from aunts and uncles and 40% from cousins.

Daily life and community

Parents/guardians were asked to rate their feelings regarding five aspects of their home and daily life — housing conditions, support network, main job or activity, free time, and finances. Most Métis children (93%) had parents/guardians who reported relatively high levels of satisfaction with the informal social supports available from family, friends and others. They most often gave the lowest ratings of satisfaction to "finances."

^{*} Statistically significant difference from reference group at p < 0.05.

Almost one-third (31%) of Métis children under age 6 were living in low-income families, compared with 18% of non-Aboriginal children. The percentage of Métis children in low-income families was higher in urban than rural areas, at 36% compared to 20%.

About 36% of Métis children living in low-income families had parents/guardians who reported that they were "dissatisfied" or "very dissatisfied" with their finances. The proportion was 15% for those who were not in low-income families. Those living in low-income families were also three times as likely to be "dissatisfied" or "very dissatisfied" with their housing situation, at 19% compared to 6%.

Research indicates that children's well-being may be linked to neighbourhood "quality". The majority of Métis children lived in a community that their parents/guardians rated as "excellent" or "very good" in terms of good schools, nursery schools and early childhood education programs (60%), adequate facilities for children (55%) and being a safe community (55%). By comparison, 16% of young Métis children were living in a community rated as "excellent" or "very good" in terms of Aboriginal cultural activities (Chart 2).

In 2006, 28% of young Métis children under age 6 had participated in or attended traditional First Nations, Métis, or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies. More than half (53%) had taken part in hunting, fishing, trapping or camping. About 30% of Métis children had participated in traditional seasonal activities such as gathering goose eggs or wild plants, for example berries, sweet grass, roots or wild rice. Children living in rural areas were more likely to have taken part in these types of activities than children living in urban areas (Table 4).

In 2006, 31% of Métis children had someone who helped them to understand Aboriginal history and culture. Of these children, most

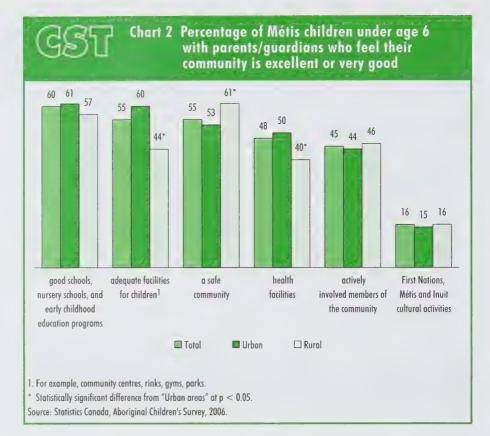


Table 4 Participation of Métis children under age 6 in selected traditional activities, 2006

	mons diffusion who have		
Total	Urban areas †	Rural areas	
	percentage		
28	27	30	
53	50	63*	
30	26	40*	
	Total 28 53	Total Urban areas † percentage 28 27 53 50	

† Reference group

were being taught by close family members – their parents (56%) and grandparents (46%), as well as aunts and uncles (13%). About 14% were learning from their teachers or child care providers.

Inuit children

Family

In 2006, the Census enumerated about 7,000 Inuit children under the age of 6 years in Canada. The

 $^{^{\}star}$ Statistically significant difference from reference group at p < 0.05. Source: Statistics Canada, Aboriginal Children's Survey, 2006.

majority (84%) lived in one of the four regions that comprise Inuit Nunaat, which means "Inuit homeland" in the Inuit language. The remaining 16% of children lived outside Inuit Nunaat, 13% in urban areas and 3% in rural areas.

The size of many Inuit families remains larger than other families across the country. For example, in 2006, 28% of young Inuit children were living in families with four or more children. The percentage was 31% in Inuit Nunaat, where the majority of Inuit children live. This is compared to 8% of non-Aboriginal children in the same age group across Canada.

In 2006, the majority of Inuit children (70%) were living with two parents, 28% with lone parents, 16% in multiple-generation households (children, parents and grandparents), and 1% with grandparents only.

The parent or guardian responded to the ACS. For the majority of Inuit children, this person was the birth mother or father (79%). Grandparents (4%) and adoptive parents (12%) made up the majority of the remaining parents or guardians. The proportion of adoptive mothers and fathers who responded to the ACS was significantly higher than that for the Métis and First Nations children living off reserve. Historically, adoption has been a common practice in Inuit society and continues to be widespread.

While members of the immediate family are primarily responsible for the upbringing of Inuit children, in many cases it is also a responsibility shared by many others in the community.⁵

In 2006, the parents/guardians of 91% of Inuit children reported that many people were involved in raising the child. Mothers were most commonly reported as being involved (92%) followed by fathers (77%). Grandparents (46%) and other relatives (47%) were also reported to be playing a part in raising the child (Table 5).

lationship to the child	Invit childre
	percentage
Mother	92
Father	77
Grandparents	46
Other relatives (aunt, uncle, cousin, sibling)	47
Other ¹	19

When asked how often the child and different people in their lives "talk or play together, focusing attention on each other for five minutes or more," it was reported that mothers were most likely to give focused attention to the child at least once a day (92%), followed by fathers (73%), siblings (73%) and grandparents (43%). At least once a week, 71% of Inuit children received attention from grandparents, 72% from aunts and uncles, and 69% from cousins.

Daily life and community

On the ACS, parents/guardians were asked to rate their feelings regarding five aspects of their home and daily life. Of these five categories — housing conditions, support network, main job or activity, free time, and finances — parents/guardians of young Inuit children gave the lowest ratings of satisfaction to housing and finances. Levels of dissatisfaction with finances and housing were similar across the four regions of Inuit Nunaat.

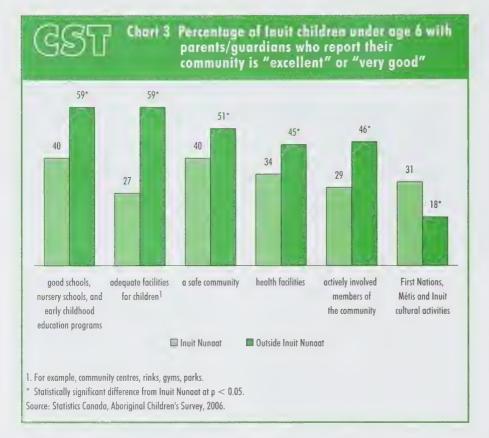
Dissatisfaction with housing is likely a reflection of the relatively poor housing conditions of some Inuit. According to the 2006 Census, 29% of Inuit children under 6 years lived in homes in need of major repairs compared to 8% of non-Aboriginal children; 43% of Inuit children were also living in crowded dwellings, compared to 7% of non-Aboriginal children.

Parents/guardians of Inuit children were asked to rate their feelings about their community on the basis of six characteristics. Inuit children who lived in Inuit Nunaat had parents/ guardians who were less likely to report that their community was "excellent" or "very good" in terms of five characteristics, compared to those living outside Inuit Nunaat. For example, while 27% of Inuit children within Inuit Nunaat had parents/ guardians who rated their community as "excellent" or "very good" in terms of adequate facilities for children (such as community centres, rinks, gyms, and parks), 59% of those living outside Inuit Nunaat had parents/ guardians who did so (Chart 3).

In 2006, about 63% of Inuit children under the age of 6 living in Inuit Nunaat had participated in or attended traditional Inuit activities such as singing, drum dancing, gatherings or ceremonies; and 58% had taken part in hunting, fishing, trapping or camping. Children living in Inuit Nunaat were more likely to participate in these activities than those living outside Inuit Nunaat.

In 2006, 60% of Inuit children living in Inuit Nunaat compared to 33% living outside Inuit Nunaat had participated in traditional seasonal activities such as gathering goose eggs or berries (Table 6).

In all regions across Inuit Nunaat, about six in ten Inuit children had taken part in traditional activities



	Invit children	who have
Type of traditional activities	Invit Nunaat †	Outside Invit Nunaa
	perce	ntage
Participated in or attended traditional First Nations, Métis or Inuit activities such as singing, drum dancing, fiddling, gatherings or ceremonies	63	36*
Taken part in hunting, fishing, trapping or camping	58	45*
Participated in seasonal activities, such as gathering goose eggs or wild plants (for example, berries, sweet grass roots or wild rice)	60	33*

such as singing, drum dancing or gatherings and hunting, fishing, trapping or camping. Participation in traditional seasonal activities like gathering eggs and berries was more common among Inuit children in Nunatsiavut (74%) and Nunavik

(66%) than in Nunavut (57%) and the Inuvialuit region (55%).

In 2006, about two-thirds of Inuit children had someone who helped them to understand their Inuit culture and history (65%). Of those who had someone involved in helping them

understand Inuit history and culture, most were being taught by their parents (76%) and grand-parents (60%).

Summary

Compared to non-Aboriginal children, young Aboriginal children were more likely to be growing up in large families. Many persons, including extended family and community members, were involved in raising young Aboriginal children. More than two-thirds of First Nations children living off reserve, of Métis and of Inuit children under 6 received focused attention from their grandparents at least once a week. Furthermore, between one-quarter and one-third received focused attention from Elders at least once a week.

In general, parents/guardians reported relatively high levels of satisfaction with their support networks from family, friends and others. The parents/guardians of at least 9 in 10 First Nations, Métis and Inuit children reported that they were "very satisfied" or "satisfied" with the social supports available from family, friends and others.

Many parents/guardians of Aboriginal children reported dissatisfaction with their finances. Parents/guardians of 29% of Inuit children and 28% of First Nations children living off reserve were "dissatisfied" or "very dissatisfied" with their finances. Among Métis children, the proportion was 21%.

Although parents/guardians of off-reserve First Nations and Métis children were generally satisfied with many aspects of their community as a place to raise children, they were less satisfied with access to activities and services that promote traditional and cultural values and customs. In 2006, parents/guardians of 17% of off-reserve First Nations children and 16% of Métis children rated their community as "excellent" or "very good" in terms of access to Aboriginal cultural activities.

Inuit children appear to have more access to cultural activities than their First Nations and Métis counterparts. About one-third (31%) of those within Inuit Nunaat had parents/guardians who rated their community as "excellent" or "very good" as a place with cultural activities.

The Aboriginal Children's Survey is a rich source of data with great potential for further research into these issues. For example, there are indicators of community and cultural strength and resilience that could be further explored. Further research using the ACS data could also help to build understanding of how culture is being transmitted inter-generationally to these young Aboriginal children, and how exposure to cultural and

traditional values and practices affect developmental and behavioural outcomes.



Vivian O'Donnell is an analyst with the Social and Aboriginal Statistics Division, Statistics Canada.

- 1. In total, the 2006 Census enumerated 131,000 Aboriginal children under the age of 6 about 40,000 lived on reserve and 91,000 lived off reserve. (A reserve is land set apart and designated for the use and occupancy of an Indian group or band as such, the terms "on-reserve" or "off-reserve" are generally not applicable to Métis or Inuit.) Census counts have been used to describe the number of Inuit, Métis and off-reserve First Nations children rather than the counts stemming from the Aboriginal Children's Survey
- (ACS) for consistency with previously released Census data. Please refer the ACS Concepts and Methods Guide for a detailed explanation of the relationship between the ACS and the Census (catalogue no. 89-634-X).
- 2. All First Nations children living in the territories were included.
- Urban areas have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-CMAs.
- Curtis, Lori J. et. al. (2004.) Child well-being and neighbourhood quality: evidence from the Canadian National Longitudinal Survey of Children and Youth. Social Science and Medicine, 58:1917-1927.
- 5. Nunavut Arctic College. "Interviewing Inuit Elders: Childrearing Practices" http://www.nac.nu.ca/OnlineBookSite/vol3/introduction.html

First Nations people: Selected findings of the 2006 Census

by Linda Gionet

As part of its contribution to the dissemination of Census findings, Canadian Social Trends is highlighting some of the key social trends observed in the 2006 Census.

In this issue, we present adaptations from the following Census analytical documents: Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census (Catalogue no. 97-558-XWE2006001); Educational Portrait of Canada, 2006 Census: Findings (Catalogue no. 97-560-XWE2006001); and Canada's Changing Labour Force, 2006 Census (Catalogue no. 97-559-XWE2006001), as well as Census data on income, housing affordability and home ownership.

irst Nations people represent a large and diverse population. They number 698,025¹ individuals and comprise 60% of over one million people who identified themselves as an Aboriginal person in the 2006 Census. (See "What you should know about this study" for terms and definitions.)

First Nations people account for 2.2% of the total Canadian population and they are growing at a rapid rate. Between 1996 and 2006, the First Nations population grew by 29%.² This rate was 3.5 times more than the 8% growth rate recorded by the non-Aboriginal population in Canada. Several factors account for the rapid growth, such as high birth rates and an increase in the number of individuals who are now identifying themselves as a First Nations person (North American Indian).³

A large proportion of the population who reported that they were First Nations people also said that they were Registered or Treaty

Indians.⁴ In the 2006 Census, 81% of First Nations people were Registered Indians.

Among First Nations people living off reserve, 68% were Registered Indians while 32% did not have Registered Indian status. Nearly all of First Nations people living on reserve were Registered Indians (98%).

This article highlights where First Nations people live, their age structure, children's living arrangements, the ability to speak an Aboriginal language, postsecondary education, employment and unemployment, income, and housing conditions (including housing affordability and home ownership).

Majority of First Nations people live in Ontario and Western provinces

Together, Ontario and the Western provinces were home to an estimated 577,300 First Nations people, or four-fifths (83%) of all First Nations people in Canada (Table 1).

The 2006 Census enumerated 158,395 First Nations people (23%) in Ontario; 129,580 (19%) in British Columbia; 100,645 (14%) in Manitoba; 97,275 (14%) in Alberta; and 91,400 (13%) in Saskatchewan.

Although a quarter of the First Nations population lived in Ontario, they represented 1.4% of the total population of that province.⁵ In contrast, First Nations people comprised a larger percentage of the total population in regions such as the Northwest Territories (31%), Yukon (21%) and Saskatchewan (10%).

In 2006, 45% of First Nations people lived in urban areas. (Urban areas include large cities, or census metropolitan areas, and smaller urban centres.)

The five census metropolitan areas (CMAs) with the largest number of First Nations people were Winnipeg (25,900), Vancouver (23,515), Edmonton (22,440), Toronto (17,275) and Saskatoon (11,510).

GST

Table 1 Size of the First Nations population, Canada, provinces and territories, 2006

ovinces and territories	Distribution (2006)	
	percentage	
Canada	100	
Newfoundland and Labrador	1.1	
Prince Edward Island	0.2	
Nova Scotia	2.2	
New Brunswick	1.8	
Quebec	9.3	
Ontario	22.7	
Manitoba	14.4	
Saskatchewan	13.1	
Alberta	13.9	
British Columbia	18.6	
Yukon Territory	0.9	
Northwest Territories	1.8	
Nunavut	0	

First Nations people are a youthful population

The age structure of the First Nations population in Canada was decidedly young in 2006. The median age of First Nations people was 25 years, while that of the non-Aboriginal population was 40 years. (Median age is the point where exactly one-half of the population is older and the other half is younger.)

About a third of the First Nations population was made up of children under age 15, while only 5% were seniors aged 65 and over. Lower life expectancy, in addition to higher fertility rates, underlies this youthful age structure.⁶

Across Canada, the median age of First Nations people living on reserve (23 years) was lower than for those living off reserve (26 years). Moreover, children under age 15 represented 34% of First Nations people living on reserve and 31% of First Nations people living off reserve.

The median age of 26 years was the same for off-reserve First Nations people with and without Registered Indian status in 2006.

The First Nations population was youngest in Saskatchewan

(median age 20 years) and Manitoba (21 years).⁷ The oldest populations were living in Newfoundland and Labrador (33 years) and Quebec (30 years).

Living arrangements for First Nations children differ from non-Aboriginal population

Compared with the non-Aboriginal population, First Nations children (14 years of age and under) were more likely to live with a lone parent, grandparent or other relative. In 2006, 37% of First Nations children lived with a lone parent, 8% lived with a grandparent or other relative. This compares with 17% of non-Aboriginal children who lived with a lone parent and less than 1% who lived with a grandparent or other relative.

About a third of First Nations children living on reserve resided with a lone parent in 2006. The percentage was higher for First Nations children living off reserve at 41%. Among those living off reserve, First Nations children with Registered Indian status were more likely than those without Registered Indian status to reside with a lone parent (44% versus 35%).

The likelihood of living with a grandparent or another relative was highest for First Nations children with Registered Indian status living off-reserve. In 2006, 10% of these children lived with relatives other than a parent, compared with 7% of First Nations children living on reserve and 6% of off-reserve First Nations children without Registered Indian status.

Over half of First Nations people living on reserve can speak an Aboriginal language

The census recorded over 60 different languages spoken by First Nations people in Canada. The First Nations languages with the largest number of speakers in 2006 were Cree (87,285), Ojibway (30,255), Oji-Cree (12,435) and Montagnais-Naskapi (11,080).

In both 2001 and 2006, 29% of First Nations people said that they could speak an Aboriginal language well enough to carry on a conversation.

This figure, however, was much higher for First Nations people living on reserve. In 2006, half of the First Nations people living on reserve (51%) could speak in an Aboriginal language compared with 12% of those living off-reserve.

Off-reserve First Nations people with Registered Indian status were more likely than those without Registered Indian status to be able to carry on a conversation in a First Nations language (17% versus 2%).

Two out of five First Nations adults (aged 25 to 64) have a postsecondary education

In 2006, 42% of First Nations people (25 to 64 years old) had completed a postsecondary education compared with 61% of the non-Aboriginal population in this age group (Chart 1). (The term postsecondary education refers to educational attainment above the level of secondary (high school) completion. See "What you should know about this study" for a more detailed explanation of the term postsecondary education.)

CST What you should know about this study

Comparing Aboriginal census data over time

Some Indian reserves and settlements did not participate in the census as enumeration was not permitted, or it was interrupted before completion. In 2006, there were 22 incompletely enumerated Indian reserves, compared to 30 in 2001 and 77 in 1996.

Most of the people living on incompletely enumerated Indian reserves and settlements have Registered Indian status. Consequently, the impact of incomplete enumeration will be greatest on data for First Nations people registered under the Indian Act.

Only the Indian reserves and settlements that participated in both censuses are included when comparing data for two census years.

Defining the Aboriginal population

There are different ways to identify the Aboriginal population based on four questions asked in the census (Aboriginal identity; member of an Indian Band/First Nation; Registered or Treaty Indian; and ethnic origin, including Aboriginal ancestries) depending on the focus and the requirements of the data user.

For the purposes of this article, two concepts are used: Aboriginal identity population, and Registered or Treaty Indian (See Definitions of terms section below).

Separate data are presented for First Nations people living on and off reserve as well as by Registered Indian status for the off-reserve population.

For more information, see *How Statistics Canada Identifies* Aboriginal Peoples: http://www.statcan.gc.ca/pub/12-592-x/12-592-x2007001-eng.htm

Definition of terms

Aboriginal identity population: Aboriginal identity refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act of Canada*, and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): is an area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgement of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or were self-employed or worked without pay in a family farm, business or professional practice. Includes those absent from their workplace due to vacation, illness, work disruption or other reason.

Employment rate: The employment rate for a particular group (age, sex, marital status, geographic area, etc.) is the number of persons employed in the week (Sunday to Saturday) prior to Census Day (May 16, 2006), expressed as a percentage of the total population, in that particular group.

Family: a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex. "Children" in a census family includes children living with their grandparent(s) with no parents present.

First Nations people: persons reporting a single response of "North American Indian" to the Aboriginal identity question. Although respondents self-identified as "North American Indian" on the census, the term "First Nations people" is used in this article. Both single and multiple responses to the Aboriginal identity question are possible, however, only the population reporting a single response of "North American Indian" is included.

Housing affordability: the share of household income spent on shelter costs, whereby a threshold of 30% is the upper limit for defining affordable housing, as defined by Canada Mortgage and Housing Corporation. Those who spend above the threshold may do so by choice, or they may be at risk of experiencing problems related to housing affordability. The data related to housing affordability does not include households living on reserve or on farms.

Income: refers to the total money income received from various sources during calendar year 2005 by persons 15 years of age and over. For a list of total income sources, please

GST What you should know about this study (continued)

refer to the 2006 Census Dictionary. http://www12.statcan.ca/english/census06/reference/dictionary/pop020a.cfm

Indian Act: The Indian Act sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources. Please refer to "Registered Indians" below for more information regarding the Indian Act.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal language.

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.

On-reserve population: The 'on-reserve' population is defined according to criteria established by Indian and Northern Affairs Canada (INAC). For a detailed definition, please refer to the 2006 Census Dictionary: http://www12.statcan.ca/english/census06/reference/dictionary/geo012a.cfm

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Registered or Treaty Indians (Status Indians): Registered Indians are people who are entitled to have their names included on the Indian Register, an official list maintained

by the federal government. Certain criteria determine who can be registered as a Status Indian. Only Status Indians are recognized as Indians under the *Indian Act*, which defines an Indian as "a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian." Status Indians are entitled to certain rights and benefits under the law.

For more information, including the inheritance rules regarding the passing of Registered Indian status from parents to children, see the Indian and Northern Affairs Canada website at: http://www.ainc-inac.gc.ca/pr/pub/wf/index E.html

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and were available for work, and were looking for employment, were on temporary lay-off, or expected to start work within 4 weeks.

Unemployment rate: The unemployment rate for a particular group (age, sex, marital status, geographic area, etc.) is the unemployed in that group, expressed as a percentage of the labour force in that group, in the week (Sunday to Saturday) prior to Census Day (May 16, 2006).

Urban areas: have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

Note

 Indian and Northern Affairs Canada. (2004). Words First: An Evolving Terminology Relating to Aboriginal Peoples in Canada, Catalogue no. QS-6181-010-BB-A1. Ottawa, p. 11.

While about the same share of First Nations and non-Aboriginal people had a trades certificate (12% and 13% respectively), First Nations people were less likely to have a university degree or a college diploma. For example, 7% of First Nations people had a university degree, compared with 23% of non-Aboriginal people; 17% of First Nations people had a college diploma, compared with 20% of non-Aboriginal people.

Among First Nations people living on reserve, 35% had completed a postsecondary education. This was

lower than the figure for off-reserve First Nations people (46%), regardless of Registered Indian Status. While off-reserve First Nations people were more likely to have a university degree or college diploma, the share with a trades certificate was about the same for people living on (13%) and off reserve (14%).

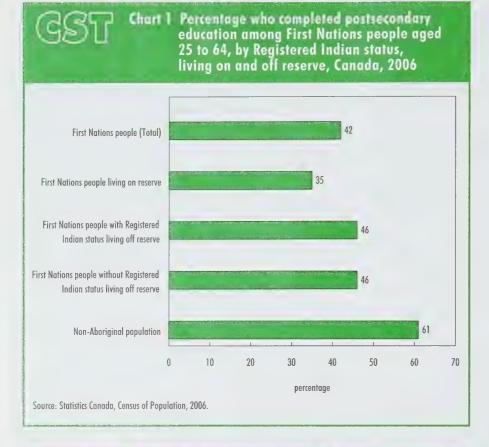
Overall, First Nations women aged 25 to 64 were more likely to have completed a postsecondary education than First Nations men in this age group (44% versus 39%). This remained the case regardless of

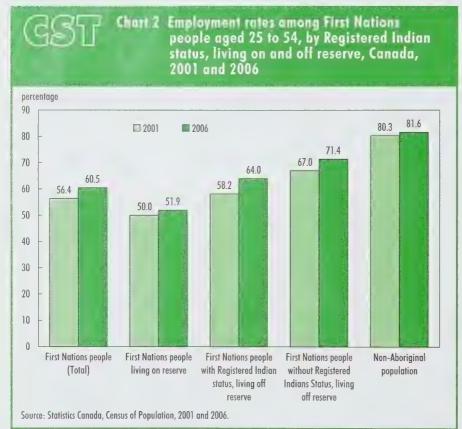
whether they lived on or off reserve or had Registered Indian status.

The gap, however, was the narrowest at 2 percentage points between off-reserve First Nations women and men (47% versus 45%), who were without Registered Indian status.

Employment rates

In 2006, 60.5% of First Nations people of core working age (25 to 54 years) were employed. Although this was lower than the employment rate for the non-Aboriginal population





(81.6%), it represented an increase of about 4 percentage points over 2001 (Chart 2).

Employment rates (the proportion of the population 25 to 54 who are employed) were lower for First Nations people living on reserve. In 2006, First Nations people living on reserve had an employment rate of 51.9% compared to 66.3% off reserve.

Among First Nations people living off reserve, people without Registered Indian status (71.4%) had higher rates of employment than people with Registered Indian status (64.0%).

In 2006, 51.9% of First Nations people living on reserve were employed, compared with 50.0% in 2001. In contrast, employment rates rose considerably for First Nations people living off reserve. For example, 64.0% of off-reserve First Nations people without Registered status were employed in 2006, up from 58.2% five years earlier.

The gap in employment rates between First Nations men and women was widest for people with Registered Indian status living off reserve. Within this group, the employment rates were 70.4% for men and 59.3% for women.

Unemployment rates estimate the proportion of people in the labour force who do not have a job and are looking for work. In 2006, the unemployment rate among First Nations people aged 25 to 54 living on reserve was 23.1% unemployed. By comparison, 12.3% of First Nations people living off reserve and 5.2% of non-Aboriginal people were unemployed.

Among First Nations people living off reserve, unemployment rates for people with Registered Indian status was 13.7% in 2006 compared to 9.4% of people without Registered Indian status.

In terms of the unemployment situation of First Nations men and women, First Nations men living on reserve had an unemployment rate of 27.1% compared to 18.5% for women. Among those living off reserve, First

Nations men and women had similar rates of unemployment.

Median income low for First Nations people

In 2005, the median annual income of the First Nations people aged 15 and over in Canada was lower than that of the non-Aboriginal population. (Median income is the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.)

The median income of First Nations people in 2005 was \$14,517, about \$11,000 lower than the figure for the non-Aboriginal population (\$25,955). This gap was similar in 2000; both groups experienced an increase in median income of approximately \$8009 between 2000 and 2005.

Overall, First Nations people living on reserve had a lower median income (\$11,224) than those living off reserve (\$17,464). Off-reserve First Nations people with Registered Indian status had a similar median income to people without Registered Indian status (\$16,771 versus \$18,969).

Among those living off reserve, the gap between median incomes of First Nations men and women was wider for people without Registered Indian status. In 2005, the median income of off-reserve First Nations men without Registered Indian status (\$23,221) was \$6,537 higher than that of their female counterparts (\$16,684). The median income of off-reserve First Nations men with Registered status (\$18,732) was \$2,764 higher than that of women (\$15,968).

Housing affordability

The housing affordability indicator refers to the proportion of household income spent on shelter. A commonlyused benchmark is spending 30% or more of before-tax income on rent or mortgage payments plus utilities. 10

In 2006, three in ten off-reserve First Nations people in the provinces lived in households spending 30% or more of their household income on shelter costs.11 This was down

from 35% in 2001, but still higher than the 21% for the non-Aboriginal population. There was little difference in housing affordability between offreserve First Nations people with and without Registered Indian status (31% and 30% respectively).

Home ownership

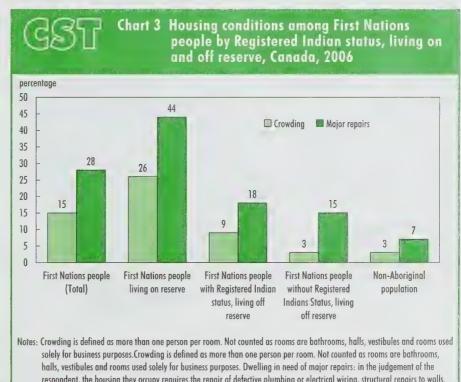
About 45% of First Nations people living off reserve were in dwellings owned by a member of the household, compared with 75% of the non-Aboriginal population. 12 The level of home ownership for the First Nations population, living off reserve, in 2006 was 4 percentage points higher than

Off-reserve First Nations people with Registered Indian status had lower home ownership levels (41%) than First Nations people without Registered Indian status (55%).

First Nations people more likely to live in crowded homes and homes needing major repairs

In 2006, First Nations people were five times more likely than non-Aboriginal people to live in crowded homes—15% versus 3%. Nonetheless, First Nations people experienced a decrease in crowding of 5 percentage points since 1996 (Chart 3). (Crowding is defined as more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.)

The highest rate of crowding was reported among First Nations people living on reserve (26%). Overall, this was nearly four times higher than the rate of crowding for First Nations people living off reserve (7%). Offreserve First Nations people with Registered Indian status were slightly more likely than people without Registered Indian status to live in a crowded home (9% versus 3%).



respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Source: Statistics Canada, Census of Population, 2006.

The quality of one's living conditions is also reflected by the state of repair of one's home. In 2006, 28% of First Nations people lived in homes that needed major repairs versus 7% of the non-Aboriginal population. (The need for major repairs was in the judgement of the respondent.)

Of First Nations people living on reserve, 44% reported having a dwelling in need of major repairs, up from 36% in 1996.

Living off reserve, the need for major repairs was similar for those with or without Registered Indian status (18% versus 15%).

Summary

First Nations people are a young and rapidly growing population that mostly lives in Ontario and the Western provinces. A large proportion of First Nations people reported that they had Registered Indian status. Compared with the non-Aboriginal population, First Nations children were more likely to live with a lone parent, grandparent or other relatives. A higher percentage of First Nations people living on reserve could converse in an Aboriginal language than those living off reserve. Two out of five First Nations adults (aged 25 to 64) have a postsecondary education. Although the employment rate and median income of First Nations adults (aged 25 to 54) were higher for those living off reserve, they remained lower than the non-Aboriginal population. First Nations people living on reserve were more likely to report having crowded homes and those needing major repairs



Linda Gionet is an analyst with the Aboriginal Statistics program, Social and Aboriginal Statistics Division, Statistics Canada.

- Note on rounding: Due to the nature of random rounding, counts may vary slightly between different census products.
- Only the Indian reserves and settlements that participated in both censuses are included when comparing data for two census years.
- According to Guimond, "Ethnic mobility is also the principal component to the recent demographic explosion of North American Indian and Métis populations. Failure to consider ethnic mobility in the analysis of Aboriginal populations would preclude proper understanding of the fuzziness of definitions, multiplication of estimates, and recent population growth." Guimond, E. (2003). Fuzzy definitions and population explosion: changing identities of aboriginal groups in Canada. In D. Newhouse and E. Peters (Eds.), Not strangers in these parts: Urban aboriginal peoples. Catalogue no. DS-3986. Ottawa: Policy Research Initiative, p.45.
- See "What you should know about this study" for a definition of the term Registered Indian status.
- It should be noted that 17 of the 22 incompletely enumerated Indian reserves in 2006 were located in Ontario and in Quebec. Of the remainder, three were in Alberta, one was in Saskatchewan and one in British Columbia.
- Statistics Canada. (2005). Projections of the Aboriginal Populations, Canada, Provinces and Territories, Catalogue no. 91-547-XIE. Ottawa: Minister of Industry, p. 25.
- In Saskatchewan, First Nations people without Registered Indian status living off reserve (3,985 people) had a median age of 18 years.
- Less than one percent of First Nations people lived with non-relatives (with no relatives present). This was the case for those living on reserve or off reserve, regardless of Registered Indian status.
- All dollar amounts from the 2001 Census have been adjusted for inflation and are reported in constant 2005 dollars.

10. According to Canada Mortgage and Housing Corporation (CMHC), a benchmark for determining housing affordability is when the share of household income spent on shelter costs (rent or mortgage payments plus utilities) is 30% or more of before-tax income. It should be noted that not all households spending 30% or more of incomes on shelter costs are necessarily experiencing housing affordability problems. This is particularly true of households with high incomes. There are also other households who choose to spend more on shelter than on other goods. Nevertheless, the allocation of 30% or more of a household's income to housing expenses provides a useful benchmark for assessing trends in housing affordability.

The relatively high shelter cost to household income ratios for some households may have resulted from the difference in the reference period for shelter cost and household income data. The reference period for shelter cost data (gross rent for tenants, and owner's major payments for owners) is 2006, while household income is reported for the year 2005. As well, for some households, the 2005 household income may represent income for only part of a year.

- 11. The housing affordability indicator was not used in the territories or for people living on reserve. The unique housing situations in these regions do not easily conform to the indicator's parameters for housing affordability.
- 12. Home ownership rates were not used for people living on reserve. The unique housing situation on reserve may not be comparable to dwellings off reserve.

The Daily Routine



Statistics Canada official release bulletin, every working day at 8:30 a.m. (Eastern time)





Is that right? You didn't read *The Daily*? Did you know that it's the best source of statistical information in the country?

Each working day,
The Daily provides economic and
social data that's available free of
charge on our Web site. Journalists
never miss it. Business leaders and
policy makers use it to make sound
decisions.

All new data from Statistics Canada must be officially announced in *The Daily*. So if you read it every day, you don't miss a thing!

The Daily delivers news directly from Statistics Canada—with easy-to-read news releases, informative tables and simple charts that clearly illustrate the news.

census data
population statistics
trends in income
consumer price index
international trade
the labour force
gross domestic
product
manufacturing shipments
farm income data
retail trade
and more ...

Subscribe to *The Daily*. It's FREE.

Visit www.statcan.gc.ca to read
The Daily when you need it.
Or subscribe to the free online
delivery service and receive
The Daily automatically
by e-mail.

Add it to your dayto-day activities!

Métis in Canada: Selected findings of the 2006 Census

by Linda Gionet

As part of its contribution to dissemination of Census findings, Canadian Social Trends is highlighting some of the key social trends observed in the 2006 Census.

In this issue, we present an adaptation from Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census (Catalogue no. 97-558-X2006001), which focuses on Métis population in Canada.

n the 2006 Census, 389,785 people identified themselves as a Métis person. This represents nearly a doubling (a 91% growth) in the size of the Métis population since 1996. By way of comparison, the First Nations and Inuit populations grew 29% and 26%, respectively, over the same period; the non-Aboriginal population grew at less than one-tenth the rate (8%). Higher birth rates and a greater tendency to self-identify as Métis on the Census underlie this increase in the Métis population over the past decade. 3

The Métis account for more than one-third (34%) of the overall Aboriginal population, up from just over one-quarter (26%) in 1996.

Métis population is young and concentrated in the West

Nearly 87% of the Métis population lives west of Quebec, with the largest percentage in Alberta (22% in 2006), followed by Ontario (19%), Manitoba (18%), British Columbia (15%) and Saskatchewan (12%). Additionally, 7% of Métis live in Quebec, 5% in the Atlantic provinces and 1% in the territories (Chart 1).

Over two-thirds of Métis (69%) in Canada live in an urban area; of these, the majority (59%) live in a census metropolitan area (CMA) and the remainder (41%) in smaller urban centres with populations under 100,000. The CMAs with the largest number of Métis residents include Winnipeg (40,980), Edmonton (27,740), Vancouver (15,075), Calgary (14,770), Saskatoon (9,610) and Ottawa-Gatineau (7,990).

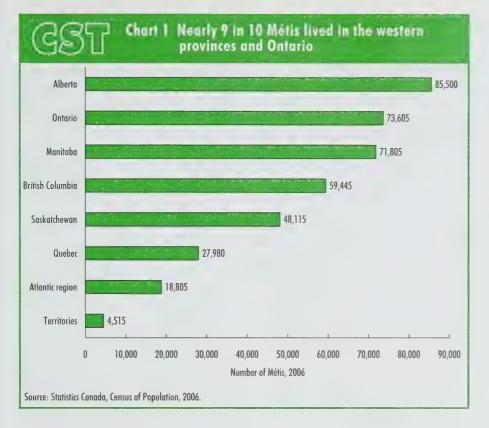
With a median age of 30 years, the Métis are younger than the non-Aboriginal population, which has a median age of 40 years. In fact, one-quarter (25%) of the Métis are children under age 15. A somewhat higher proportion of Métis in Saskatchewan (29%), Manitoba (27%) and Alberta (27%) are children.

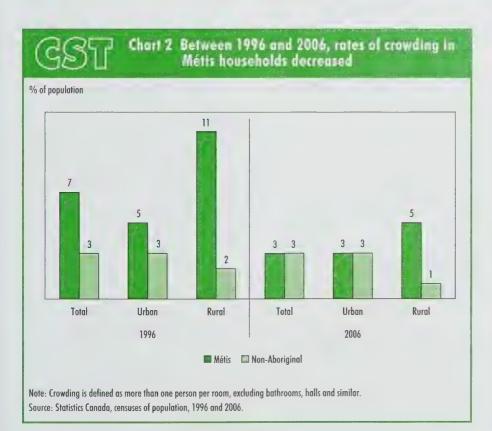
Métis children are almost twice as likely as non-Aboriginal children to live in a lone-parent family. In 2006, 31% of Métis children lived with a lone mother or father, compared with 17% of non-Aboriginal children. In Manitoba (35%) and Saskatchewan (36%), more than one-third of Métis children under age 15 lived with one parent. In cities where Métis made up a large proportion of the population – for instance, Winnipeg, Regina and Edmonton – about four in ten Métis children lived in lone-parent families.

(GST) Who are the Métis?

In this article, Métis refers to people who identify as Métis on the Census. This definition differs from that adopted by the Métis National Council (MNC), whereby: "Métis means a person who self-identifies as Métis, is of historic Métis nation ancestry, is distinct from other Aboriginal peoples and is accepted by the Métis nation". According to the MNC, Métis ancestry derives, in part, from a person having ancestry from the historic Métis nation homeland, an area in west central North America.

Because the definition of Métis in this article is broader in scope than the MNC's definition, the information about the Métis population presented here may vary from that provided by the MNC's national registry.





Older Métis more likely to speak an Aboriginal language

Overall, 4% of Métis had knowledge of an Aboriginal language in 2006, down slightly from 5% in 2001. Those living in rural areas were more likely to be Aboriginal language speakers, at 6% compared with 2% of urban dwellers.

Older Métis were more likely to speak an Aboriginal language. An estimated 12% of Métis aged 75 years and over could converse in an Aboriginal language, compared with 9% of those aged 65 to 74, and 6% of people aged 45 to 64. Less than 3% of Métis aged 44 and younger spoke an Aboriginal language.

Cree is the Aboriginal language most often spoken among the Métis (9,360 speakers in 2006). Other languages spoken by Métis include Dene (1,620), Ojibway (1,345) and other Algonquian languages, as well as Michif (fewer than 1,000 speakers).

Although few Métis are able to converse in an Aboriginal language, about half of the Métis population have reported that keeping, learning or re-learning their Aboriginal language was important or very important to them.⁵

Crowding and need for major repairs

At the national level, 3% of Métis lived in crowded housing conditions in 2006, a rate equal to that of the non-Aboriginal population. This proportion marks a change from 1996, when 7% of the Métis population lived in crowded households.

Crowding was more common for Métis in rural than urban areas, at 5% compared with 3% in 2006. (In 2006, about one-third of the Métis population lived in rural areas.) Métis in rural Saskatchewan (11%) and rural Alberta (8%) were most likely to experience crowded housing conditions. Nevertheless, over the ten-year period from 1996 to 2006, rates of rural crowding declined in most parts of the country, especially in the Prairies. For instance, in rural

Saskatchewan it dropped from 21% to 11%, and in rural Alberta it fell by almost half from 15% to 8% (Chart 2).

While there is little difference overall between the Métis and non-Aboriginal populations in terms of crowding, Métis are more likely to live in homes that need major repairs. In 2006, 14% of Métis occupied dwellings that needed major repairs, a proportion twice as high as that of the non-Aboriginal population (7%).

Once again, conditions varied between the Métis living in rural (18%) compared to urban (12%) areas. In Ontario, Quebec, British Columbia and the Atlantic provinces, the gap was smaller, but in Saskatchewan and Alberta (where one-third of the Métis population reside), rural Métis were almost twice as likely as urban Métis to occupy housing that needed major repairs.

At the national level, levels of housing affordability among the Métis were similar to those for the non-Aboriginal population. In 2006, 22% of Métis lived in a household that spent at least 30% of its income on shelter costs, compared with 21% of the non-Aboriginal population. At the provincial level, Ontario (24%) and British Columbia (29%) recorded rates of housing affordability above the national Métis average. Additionally, the widest gap between the Métis and the non-Aboriginal population was in Saskatchewan, at 21% and 15%, respectively.

Métis are less likely than the non-Aboriginal population to own their own home. In 2006, 64% of Métis lived in a home that was owned by a member of the household; for the non-Aboriginal population, the proportion was 75%.

While the national homeownership rate is lower for the Métis population than the non-Aboriginal population, the provincial gap is particularly wide in the Western provinces. For instance, in Saskatchewan and Alberta, the proportion of Métis who lived in their own homes were 20 and 18 percentage points lower,

respectively, compared to the non-Aboriginal population.

College education more common among Métis

Half of Métis adults aged 25 to 64 have completed a postsecondary education: the comparable proportion in the non-Aboriginal population is 61%. A college education was most common, with 21% of Métis having completed a diploma, followed by a trades certificate (16%). Between 2001 and 2006, the percentage of Métis with a university degree increased from 7% to 9%. This percentage was 14 percentage points less than the non-Aboriginal population (23%).

In the Prairie provinces and New Brunswick, the proportion of Métis adults who have a postsecondary qualification was slightly lower than the national Métis average. In the remaining provinces, the proportion was higher than the Métis national average, aged 25 to 64.

Métis women were somewhat more likely to have a postsecondary education, at 51% compared with 48% of men in 2006. Métis women were more likely to have a college diploma – 25% versus 17% of men – while Métis men were more likely to have a trades certificate – 21% versus 12% of women. In addition, Métis women were slightly more likely to have a university degree, at 10% compared with 8% of men.

In most of the Atlantic provinces and in Quebec, Métis men had a greater likelihood than women of finishing a postsecondary education, particularly a trades certification.

Employment rates for adults of core working age

Between 2001 and 2006, the employment rates for Métis adults of core working age (aged 25 to 54 years) increased 4 percentage points from 70.4% to 74.6%. Although the Métis employment rate was lower than that of the non-Aboriginal population (81.6%), the gap has narrowed between these two populations by about 3 percentage points.

Métis employment rates were lower than those of the non-Aboriginal population across the country in 2006. The differences were widest in New Brunswick (18 percentage points), Prince Edward Island (14 points), Saskatchewan (14 points) and Quebec (13 points).

Métis men had higher employment rates than women, at 79.2% compared with 70.4%. In the provinces with larger Métis populations, Métis men had higher rates of full-time, full-year employment than Métis women. In parts of the country with smaller Métis populations, as in Newfoundland, New Brunswick, the Yukon and Nunavut, Métis women were more likely than Métis men to be employed.

Unemployment rates represent the proportion of people in the labour force who are looking for work but cannot find it. At the national level, unemployment rates of Métis adults of core working age were higher than those in the non-Aboriginal population— in 2006, 8.4% versus 5.2%, respectively.

Between 2001 and 2006, the unemployment rates for Métis decreased 4 percentage points from 12.5% to 8.4%. Although the Métis unemployment rate was lower than that of the non-Aboriginal population (5.2%), the gap has narrowed by 3 percentage points.

The percentage of unemployed Métis in the labour force was below the Métis national average west of Quebec, except in Saskatchewan and Nunavut.

The unemployment rate for Métis women was comparable to that for Métis men, at 8.2% compared with 8.6% in 2006.

Median income

In 2005, the median income of the Métis in Canada was lower than that of the non-Aboriginal population. Indeed, it was about \$5,000 less than the median income of \$25,955 reported for the non-Aboriginal population. Nonetheless, between 2000 and 2005, the Métis median

income increased by about \$2,600, over three times faster than the nearly \$800 increase for the non-Aboriginal population. This rise narrowed the income gap between the Métis and the non-Aboriginal population during this period.

Across the country, the difference in median income between the Métis and the non-Aboriginal population was widest in Alberta and in the territories. In Alberta, the Métis median income (\$22,839) was about \$6,600 less than that of the non-Aboriginal population (\$29,501). Within the small Métis population in the territories, there was a larger gap. In the Northwest Territories, for example, the Métis median income (\$36,211) was approximately \$13,000 less than that of the non-Aboriginal population (\$49,219).

In most regions, the median income of Métis women was less than that of Métis men. In 2005, it was about \$9,000 less (Métis men reported \$26,466), a difference consistent with that recorded in 2000. At the regional level, the gap was widest in Alberta and Nova Scotia. Métis women in Alberta made about \$14,000 less than Métis men (\$31,869) while Métis women in Nova Scotia made about \$10,200 less than their male counterparts (\$25,329).

Summary

In 2006, over one-third of people – almost 390,000 – who identified themselves as an Aboriginal person reported that they were Métis. In the last 10 years, the Métis population has grown by 91%, due to higher fertility rates, and an increasing tendency to self-identify as Métis.

Almost nine in ten Métis live in the Western provinces and Ontario. The Métis are the most urbanized of the Aboriginal groups, with 69% of the population living in an urban area in 2006.

Overall, housing conditions of the Métis population improved between 1996 and 2006. In 2006, about 3%

of Métis reported living in crowded conditions, about the same rate as the non-Aboriginal population; however, they were more likely to live in homes that needed major repairs, especially in rural areas.

Of those Métis who had completed a postsecondary education, most had obtained a college diploma or trades certificate. Between 2001 and 2006, the percentage of Métis who had completed a university degree increased.

Métis adults of core working age were less likely to be employed than the non-Aboriginal population, at 74.6% compared with 81.6% in 2006. In comparing the employment rates of the Métis and the non-Aboriginal population, the largest differences were recorded in New Brunswick (18 percentage points), Prince Edward Island (14 points), Saskatchewan (14 points) and Quebec (13 points).

GST

Linda Gionet is an analyst with the Aboriginal Statistics program, Social and Aboriginal Statistics Division, Statistics Canada.

- All estimates in this article are based on the Aboriginal identity population. For descriptions of definitions and concepts used, please see "What you should know about this study" at the end of this article.
- Data have been adjusted to account for incompletely enumerated reserves in 1996 and 2006.
- Statistics Canada. (2005). Aboriginal Conditions in Census Metropolitan Areas, 1981-2001. Statistics Canada, Catalogue no. 89-613-MIE.Ottawa: Minister of Industry.
- Métis National Council. (2007) Who are the Métis: National Definition of Métis. Retrieved October 31, 2008 from Métis National Council Website: http://www.metisnation.ca/who/definition. html
- 5. Statistics Canada. (2008) Aboriginal Peoples Survey, 2006

Need more information from Statistics Ganada?

Call our inquiries line:

1-800-263-1136

To order publications:

Order line: 1-800-267-6677 Internet: infostats@statcan.gc.ca TTY line: 1-800-363-7629

Accessing and ordering information

Canadian Social Trends
Print format, semi-annual
(twice per year)*

(Catalogue no. 11-008-X) \$24 per issue, \$39 per annual subscription

PDF/HTML format, every 6 weeks (Catalogue no. 11-008-X): Free

* A CST print anthology is now issued twice a year. The anthology contains all the CST articles released electronically in the previous six months, and the subscription price remains the same.

Education and Library Discount: 30% discount (plus applicable taxes in Canada or shipping charges outside Canada)

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada tollfree at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

If you're on the move...

Make sure we know where to find you by forwarding the subscriber's name, old address, new address, telephone number and client reference number to:

Statistics Canada Finance

R.H. Coats Bldg., 6th Floor 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

or by phone at 1-800-263-1136 or 1-800-267-6677; or by fax at 1-877-287-4369; or by Internet at infostats@statcan.gc.ca

We require six weeks advance notice to ensure uninterrupted delivery, so please keep us informed when you're on the move!

GST What you should know about this study

Aboriginal identity refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit; and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada; and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): an area consisting of one or more neighbouring municipalities situated around a major urban core. A CMA must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgment of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or were self-employed or worked without pay in a family farm, business or professional practice. It includes those absent from their workplace due to vacation, illness, work disruption or other reason.

First Nations people: persons reporting a single response of "North American Indian" to the Aboriginal identity question. Although respondents self-identified as "North American Indian," the term "First Nations people" is used in this article.

Housing affordability: the share of household income spent on shelter costs, whereby a threshold of 30% is the upper limit for defining affordable housing, as defined by Canada Mortgage and Housing Corporation. Those who spend above the threshold may do so by choice, or they may be at risk of experiencing problems related to housing affordability. The data related to housing affordability does not include households living on reserve or on farms.

Income: refers to the total money income received from various sources during calendar years 2005 by persons 15 years of age and over. For a list of total income sources, please refer to 2006 Census Dictionary. http://www12.statcan.ca/English/census06/reference/dictionary/pop020a.cfm

Inuit: persons reporting a single response of "Inuit" to the Aboriginal identity question. Inuit of the western Arctic are known as Inuvialuit; in this article, the term "Inuit" includes Inuvialuit.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal language.

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the dollar amount where one-half of income recipients aged 15 years and over has more income and the other half has less income. Persons without income are not included in the calculation of this statistic. All dollar figures are expressed in 2005 constant dollars, i.e., in terms of their value, or purchasing power, in 2005.

Métis: persons reporting a single response of "Métis" to the Aboriginal identity question.

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and was available for work, and was looking for employment, was on temporary lay-off, or expected to start work within 4 weeks.

Urban areas: an area with a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

Inuit in Canada:

Selected findings of the 2006 Census

by Linda Gionet

Readers should note that all estimates are based on the Aboriginal identity population. For definitions of terms, please see "What you should know about this study" at the end of this article.

or over 5,000 years, Inuit have inhabited the northern reaches of Canada. In 2006, almost 4% of people who identified themselves as an Aboriginal person – 50,485 – reported that they were Inuit.

The great majority live in the huge area stretching across Canada's North from Labrador to the Northwest Territories, known as Inuit Nunaat, the expression for "Inuit homeland" in the Inuit language. While Inuit share a common culture and traditions, the four regions of Inuit Nunaat are marked by considerable linguistic and geographic diversity.

The largest of these four regions is Nunavut, formed in 1999 from the eastern part of the Northwest Territories. Nearly half (49%) of Inuit in Canada live in Nunavut. Almost one in five Inuit (19%) live in Nunavik, an area comprising 660,000 square kilometres in northern Quebec (Chart 1).

About 6% of the Inuit population resides in the Inuvialuit region, located on almost 91,000 square kilometres in the Northwest Territories. People of this region are known as Inuvialuit, Inuit of the western Arctic. The smallest region in Inuit Nunaat is Nunatsiavut, along the northern coast of Labrador and home to 4% of the Inuit population.

Just over one in five (22%) Inuit did not live in Inuit Nunaat in 2006. Among this group, over three quarters (76%) were settled in urban areas. According to the 2006 Census, the urban centres with the largest Inuit populations were Ottawa-Gatineau (725), Yellowknife (640), Edmonton (590), Montréal (570), and Winnipeg (355). In addition, Iqaluit was the community within Inuit Nunaat with the largest Inuit population, at 3,540.

A young and growing population

The Inuit population grew 26% between 1996 and 2006, three times faster than Canada's non-Aboriginal population (8%). The increase was greatest in Nunavik (25%) and Nunavut (20%), the two most populous regions of Inuit Nunaat.

The higher fertility rate of Inuit women has also contributed to making the Inuit population very young. In 2006, more than one-third (35%) of Inuit were children under the age of 15. Inuit children accounted for almost 40% of the Inuit population in Nunavut and in Nunavik, 30% in Inuvialuit, 27% in Nunatsiavut and 28% outside Inuit Nunaat.

Census data show that the median age of the Inuit population was only

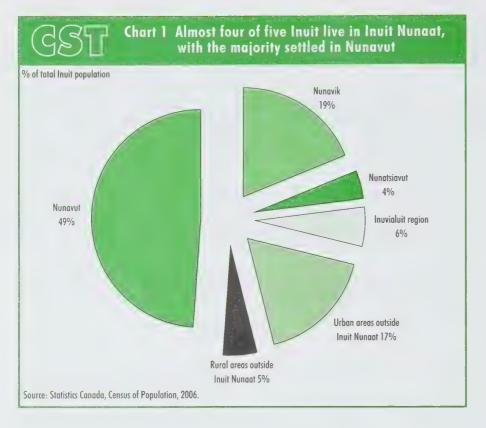
22 years, about half that of the non-Aboriginal population (40 years). Inuit were also younger than First Nations people, whose median age was 25 years, and the Métis, whose median age was 30 years.

This young, growing Inuit population may create a demand for services such as housing, education and health care for families with children, and skills training for young adults establishing families and seeking work in both the wage and traditional Inuit economies.¹

One-quarter of Inuit children live with a lone parent

In 2006, 69% of Inuit children under age 15 lived in a two-parent family. By comparison, 82% of non-Aboriginal children lived with both parents.

Many Inuit lived in other family arrangements. Some 4,700 children, representing 26% of all Inuit children, lived with a lone parent, most often with their mother. Another 4% lived with a grandparent or other relative, a proportion that may be explained by the practice of traditional or custom adoption among Inuit. Children are sometimes given by their birth parents to a relative to raise as their own, a tradition that has been practised for thousands of years.²



Within Inuit Nunaat, certain regions had higher proportions of lone-parent families. In the Inuvialuit and Nunavik regions, almost one-third of Inuit children under age 15 lived with a lone parent; in Nunavut and Nunatsiavut, less than one-quarter were in lone-parent families. Outside Inuit Nunaat, Inuit children in census metropolitan areas (CMAs) were twice as likely to live with a lone parent as non-Aboriginal children, at 36% compared with 18%.

About 7 in 10 Inuit have knowledge of the Inuit language

There are five primary dialects collectively known as the Inuit language.³ While some of these dialects have many speakers, others have very few.

In 2006, 69% of the Inuit population in Canada reported having knowledge of the Inuit language. This represents a slight decrease from 72% in 1996.

In Inuit Nunaat, 84% of the Inuit population could converse in the Inuit

language. These figures mask regional variation, however. Knowledge of the Inuit language is almost universal among Inuit in Nunavik (99%) and Nunavut (91%). By contrast, in Nunatsiavut, over one-quarter (27%) of Inuit could speak the language well enough to converse. In the Inuvialuit region, the figure was one-fifth (20%).

Outside Inuit Nunaat, 15% of Inuit spoke the Inuit language. The rate increased to 19% in CMAs.

According to a report published by Inuit Tapiriit Kanatami and Indian and Northern Affairs⁴, overall, "the [Inuit] language remains strong today despite many forces contributing to its erosion." The report mentions factors such as a limited Inuit language curriculum in the classroom and an ever-growing southern media presence, which "make it more challenging to pass the language from one generation to the next." 6

Housing in Inuit Nunaat is crowded and in need of major repairs

While Inuit have traditionally lived in multi-family groupings, a number of reports have suggested that the high rate of families sharing a home may be due to the serious shortage of housing in many communities throughout Inuit Nunaat.^{7,8}

In 2006, Inuit were 10 times more likely than the non-Aboriginal population to be living in crowded homes, at 31% compared to 3%. This rate of crowding among Inuit is somewhat reduced from 1996.

Crowding was common in Inuit Nunaat, where just over 15,000 Inuit, or 38% of the total Inuit population, lived in crowded conditions in 2006. In 2006, crowding was much more common in Nunavik (49%) and Nunavut (39%) compared with the Inuvialuit region (19%) and Nunatsiavut (13%). The lower rates in Nunatsiavut may be due to new housing construction funded by the government of Newfoundland and Labrador.⁹

Although 38% of Inuit in Inuit Nunaat were living in crowded conditions, this represented a decline from 43% in 1996.

The state of living conditions is also partly determined by the need for major repairs to the home a family is occupying. In 2006, about 28% of the total Inuit population reported living in a home needing major repairs such as plumbing or electrical work. The figure was 7% for the non-Aboriginal population across Canada.

In Inuit Nunaat, where extreme weather conditions can result in much wear and tear on a house, 31% of Inuit lived in homes that needed major repairs. This was a rise from 19% in 1996. The rate increased during the same period in all regions except Nunatsiavut; it increased by 38 percentage points (to 46%) in Nunavik¹⁰, 5 percentage points (to 28%) in the Inuvialuit region and 5 percentage points (to 26%) in Nunavut. In Nunatsiavut, the proportion of Inuit housing in need of

major repairs declined 7 percentage points to 34% in 2006. This decrease coincides with an increase in housing construction, as noted on the previous page.

Health experts maintain that inadequate housing can be associated with a host of health problems. For instance, hospitalization rates for Inuit children with severe lower respiratory tract infections are the highest in the world, and recent research has shown that crowding, along with poor ventilation, in Inuit homes contributes to these rates.¹¹ Such living conditions can also lead to the transmission of infectious diseases such as tuberculosis 12 and hepatitis A, as well as increase risk for injuries, mental health problems and family tensions. 13,14

In 2006, 30% of Inuit in Canada owned their homes. By contrast, 75% of the non-Aboriginal population owned their homes. The rate of homeownership among Inuit varies by region with rates of 65% in Newfoundland and Labrador, 41% in the Northwest Territories, 26% in Nunavut and 9% in Quebec.

More than one-third of the Inuit adult population has a postsecondary qualification

Although half of the Inuit population (51%) aged 25 to 64 years had less than a high school diploma in 2006, 36% had a postsecondary diploma or degree. By comparison, the majority of the non-Aboriginal population (61%) had completed a postsecondary education program. While the importance of informal learning among Inuit cannot be overstated, the focus of this article is the formal education that takes place within the school system.

According to a recent report by Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada, there are many reasons for the lack of formal schooling among the Inuit population. 15 Until the recent past, much learning for Inuit took place on the land in an informal setting. Traditional knowledge and life skills were gained by observing actions, listening to, and discussing things with elders and other community members. 16 In contrast, many of today's Inuit are exposed to a curriculum developed in the South that may lack cultural relevance. However, some positive Inuit-specific education models do exist. 17

Of the 36% of Inuit adults with postsecondary graduation, most had obtained either a college diploma (17%) or a trades certificate (13%) while 4% had earned a university degree. However, there is a strong geographic component to educational attainment in the Inuit population.

In 2006, almost half (49%) of Inuit adults living outside Inuit Nunaat had a postsecondary education; furthermore, 31% had a college diploma or university degree. In contrast, 32% of adults living in Inuit Nunaat had postsecondary credentials. with 17% of them having college or university.

Even within Inuit Nunaat, levels of educational attainment differed by region. In Nunavut and Nunavik, about a third of the adult population had completed a postsecondary education: 21% of adults in Nunavut had college or university and 10% had a trades certification; in Nunavik the proportions were reversed, at 21% for trades and 8% for college or university. Nunatsiavut (40%) and the Inuvialuit region (35%) had higher rates of postsecondary completion.

Overall, Inuit men and women had similar rates of postsecondary completion. In 2006, 37% of Inuit men aged 25 to 64 had a postsecondary education compared with 36% of adult Inuit women. However, women were more likely than men to have a college or university education - 24% compared with 18% for men - while men were twice as likely to hold a trade certificate, at 18% versus 9% of women.

Some improvement in the labour force, but the gap between the Inuit and the non-Aboriginal population remains

Between 2001 and 2006, the Canadalevel employment rate for Inuit adults aged 25 to 54 rose from 60.3% to 61.2%. Despite this improvement. the gap with non-Aboriginal people remained relatively unchanged: over the same period, employment rose from 80.3% to 81.6% for the non-Aboriginal population of core working age.

In Inuit Nunaat, the employment rate for Inuit actually declined from 60.9% in 2001 to 59.6% in 2006. Rates remained fairly stable in Nunavut, but slid in the other regions, with Nunatsiavut recording the lowest rate, at 45.8% (Chart 2).

By contrast, outside Inuit Nunaat, employment rates for core workingage Inuit adults rose considerably from 58.2% to 66.0%.

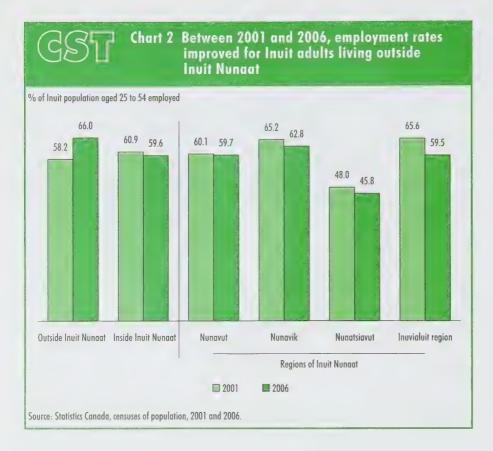
Employment rates for men and women in Inuit Nunaat are about the same in most regions, except Nunatsiavut where women have a higher rate (53.1%) than men (39.3%). Outside Inuit Nunaat, the employment rate is higher for men (69.8% versus 63.4%). This gender gap is more reflective of employment rates observed in the non-Aboriginal population, where women are less likely to take part in the labour

In 2006, the unemployment rate was almost four times higher for Inuit adults of core working age than for their non-Aboriginal counterparts, at 19.0% versus 5.2%. (Unemployment rates measure the proportion of people in the labour force who are looking for work, but cannot find

Within Inuit Nunaat, unemployment rates in Nunavut (19.1%) and Nunavik (18.8%) mirrored the Canada-wide rate for the Inuit population. However, the rates were much higher in Nunatsiavut (33.6%) and the Inuvialuit region (24.6%).

Outside Inuit Nunaat, the unemployment rate for Inuit was lower than the Inuit national average (19.0%), at 14.9% in 2006.

Overall the unemployment rate was higher for Inuit men than for Inuit women – 23.0% compared with 15.1%. The rates within Inuit Nunaat



were slightly higher than the national average, at 24.4% for men and 16.0% for women. Outside Inuit Nunaat, unemployment rates in 2006 were 18.0% and 12.6%, respectively.

According to Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada, many factors affect the indicators of employment for northern Inuit and these factors are often very different from those in the South. ¹⁸ For instance, across northern Canada people are faced with fewer employment opportunities ¹⁹ coupled with a weak infrastructure to support industry and housing for employees. ²⁰

Income of Inuit is lower than the non-Aboriginal population, particularly in Nunavut

In 2005, the median income of Inuit in Canada was lower than that of the non-Aboriginal population. Specifically, it was about \$9,000 less

than the median income of \$25,955 reported by the non-Aboriginal population. This gap was similar to the gap observed in 2000.

The lower incomes for Inuit, compared with the non-Aboriginal population, are significant when one considers the higher costs of living in the North. Expenses for basic needs such as food, housing, clothing and harvesting supplies are much higher than in the southern parts of Canada.²¹ For example, in most isolated northern communities. it may cost \$350-\$450 a week to provide a nutritious diet for a family of four, compared to about \$200 in the South.²² In addition, the Canadian Arctic is unique in that it is "mixed" with both traditional Inuit and wage economies. The traditional economy contributes to Inuit communities through the harvesting of country food, sewing of clothing and caring for community members.²³

Within Inuit Nunaat, the Inuit median income was lower than for the non-Aboriginal population. In 2005, the Inuit median income (\$16,669) was \$43,378 less than that of the non-Aboriginal population (\$60,047). Outside Inuit Nunaat, the median income was \$17,673. These gaps are similar to those between the median incomes of Inuit and the non-Aboriginal population in 2000.

In Inuit Nunaat, the highest median income (\$18,994) was in Nunavik, while the lowest was in Nunavut (\$15,939). In Nunatsiavut, the figure was \$16,576 and \$16,944 in the Inuvialuit region. Since 2000, all communities within Inuit Nunaat have experienced an increase in median income. The greatest increase occurred in Nunatsiavut where median income rose by \$3,000.

Summary

In 2006, almost 50,500 people identified themselves as Inuit. The large majority – over three-quarters of them – lived in Inuit Nunaat, the traditional Inuit homeland. Inuit are a very young population, with over one-third under the age of 15, and their numbers have grown 26% between 1996 and 2006.

Over two-thirds of the total Inuit population can conduct a conversation in the Inuit language.

Over one-third of Inuit adults have completed a postsecondary education. However, Inuit employment rates remain lower than those for the non-Aboriginal population, especially in Inuit Nunaat. Unemployment is also higher inside Inuit Nunaat than outside.



Linda Gionet is an analyst with the Aboriginal Statistical Program, Social and Aboriginal Statistics Division, Statistics Canada.

CST What you should know about this study

Aboriginal identity: refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit; and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada; and/or those who reported they were members of an Indian band or First Nation.

Census metropolitan area (CMA): is an area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000, of which 50,000 or more live in the urban core.

Crowding: more than one person per room. Not counted as rooms are bathrooms, halls, vestibules and rooms used solely for business purposes.

Dwellings in need of major repairs: in the judgment of the respondent, the housing they occupy requires the repair of defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.

Employed: during the reference week prior to Census Day, persons who had a paid job or was self-employed or worked without pay in a family farm, business or professional practice. Includes those absent from their workplace due to vacation, illness, work disruption or other reason.

Family: a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex. 'Children' in a census family include grandchildren living with their grandparent(s) but with no parents present.

Knowledge of an Aboriginal language: the respondent is able to conduct a conversation in a given Aboriginal language.

Income: refers to the total money income received from various sources during calendar year 2005 by persons 15 years of age and over. For a list of total income sources, please refer to 2006 Census Dictionary. http://www12.statcan.ca/english/census06/reference/dictionary/pop020a.cfm

Inuit: persons reporting a single response of "Inuit" to the Aboriginal identity question. Inuit of the western Arctic are

known as Inuvialuit; in this article, the term "Inuit" includes Inuvialuit.

Inuit Nunaat: 'Inuit Nunaat' is the Inuit language expression for 'Inuit homeland', an expanse comprising more than one-third of Canada's land mass, extending from northern Labrador to the Northwest Territories. Inuit have inhabited this vast region, in what is now known as Canada, for 5,000 years. In recent years, four Inuit land claims have been signed across Inuit Nunaat.

While Inuit in each of these regions share a common culture and many traditions, each region is, at the same time, distinct. For example, traditions can sometimes vary and there is much linguistic and geographic diversity from one region (and sometimes from one community within the same region) to the next. The four regions within Inuit Nunaat are: Nunatsiavut, Nunavik, Nunavut and the Inuvialuit region. For more information on these four regions, please refer to Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census. Statistics Canada, Catalogue no. 97-558-X: p. 21-22.

Median age: the point where exactly one-half of the population is older and the other half is younger.

Median income: the point where exactly one-half of income recipients aged 15 years and over has more income and the other half has less income.

Postsecondary education: educational attainment above the level of secondary (high school) completion. This includes apprenticeship or trades certificate; college or CEGEP diploma; university certificate or diploma below bachelor level; university degree at bachelor's degree and above.

Unemployed: during the reference week prior to Census Day, persons who did not have paid work or self-employment work and was available for work, and was looking for employment, was on temporary lay-off, or expected to start work within 4 weeks.

Urban areas: have a population of at least 1,000 and no fewer than 400 persons per square kilometre. They include both census metropolitan areas and urban non-census metropolitan areas.

- Statistics Canada. (2008). Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census. Statistics Canada, Catalogue no. 97-558-XIE. Ottawa: Minister of Industry: p. 19.
- 2. Statistics Canada. (2008): p.27.
- 3. The five dialects within the Inuit language are: (a) Inuvialuktun, spoken in the Inuvialuit region in the Northwest Territories; (b) Inuinnaqtun (primarily in some communities in western Nunavut); (c) Inuttitut (Eastern Nunavut); (d) Inuttitut (Nunavik); and (e) Inuttitut (Nunatsiavut).
- 4. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007a). Inuit Social Trends Series: Knowledge and use of Inuktitut among Inuit in Canada, 1981-2001. Indian and Northern Affairs Canada, Catalogue R2-468/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
- The report uses the term "Inuktitut" to describe a collection of Inuit dialects.
 This article, however, uses the term "Inuit language" as Inuktitut does not include all Inuit languages or dialects.
- 6. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007a): p.2.
- Pauktuutit Inuit Women of Canada. (2006). The Inuit Way: A Guide to Inuit Culture. http://www.pauktuutit.ca/pdf/ publications/pauktuutit/InuitWay_e.pdf.
- 8. Four Worlds Centre for Development Learning. (November 2007). You Just Blink and it Can Happen: A Study of Women's Homelessness North of 60, Pan-Territorial Report. Four Worlds Centre for Development Learning, Qulliit Nunavut Status of Women Council, YWCA Yellowknife, Yellowknife Women's Society, Yukon Status of Women's Council.
- In 2000, \$7.7 million was allocated for the construction of new housing units and major repairs to existing housing stock through the Northern Coastal Labrador Strategic Initiative.

- According to the 2006 Census, fourfifths of Nunavik's housing stock was over 15 years of age. This represents an increase of 10 percentage points from 1996.
- Kovesi, T., Gilbert, N., Stocco, C., Fugler, D., Dales, R., Guay, M. and Miller, J.D. (2007). Indoor air quality and the risk of lower respiratory tract infections in young Canadian Inuit children. Canadian Medical Association Journal, 177 (2).
- 12. In 2003, the tuberculosis rate for Inuit was more than 10 times higher than that for the total Canadian population. Public Health Agency of Canada. (2003.) Tuberculosis in Canada. Public Health Agency of Canada, Catalogue no. HP37-5/2003. Ottawa: Public Health Agency of Canada.
- Statistics Canada. (2003). Aboriginal Peoples Survey 2001 – Initial Findings: Well-being of the Non-reserve Aboriginal Population. Statistics Canada, Catalogue no. 89-589-XIE. Ottawa: Minister of Industry.
- 14. Health Canada. (1999). A Second Diagnostic on the Health of First Nations and Inuit People in Canada. Ottawa: Health Canada.
- 15. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007b). Inuit Social Trends Series: Gains made by Inuit in formal education and school attendance, 1981-2001, Indian and Northern Affairs Canada, Catalogue R2-452/2006E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
- National Inuit Youth Council. (2005). Inuit Youth and Education. http://tapirisat. ca/inuit-youth/niyc-education.html.
- 17. The James Bay and Northern Québec Agreement (Gouvernement du Québec et Hydro-Québec) created the Kativik School Board in 1975 to serve the people living in the 14 communities of Nunavik and to lead to greater Inuit control over formal education. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007b).

- 18. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007c). Inuit Social Trends Series: Employment, Industry and Occupations of Inuit in Canada, 1981-2001, Indian and Northern Affairs Canada, Catalogue R2-455/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
- 19. Pricewaterhouse Coopers LLP. (2003). The Cost of Not Successfully Implementing. Article 23: Representative Employment for Inuit within the Government. http://tunngavik.com/publications.
- 20. The Conference Board of Canada. (2002).
 2002 Nunavut Economic Outlook: An
 Examination of the Nunavut Economy.
 Ottawa: The Conference Board of
 Canada. Prepared for the Nunavut
 Economic Development Strategy.
- 21. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007d). Inuit Social Trends Series: Levels and Sources of Individual and Household Level Income for Inuit in Canada, 1980-2000. Indian and Northern Affairs Canada, Catalogue R2-461/2007E-PDF. Ottawa: Minister of Public Works and Government Services Canada.
- 22. Indian and Northern Affairs Canada. (2008). Revised Northern Food Basket Highlights of Price Survey Results for 2006-2007. http://www.ainc-inac.gc.ca/pa/nap/air/hpsr0607-eng.asp
- 23. In this article, attention is focused solely on cash income measures from the census. However, readers should bear in mind that throughout much of the North, the economic and cultural benefits of hunting, fishing, gathering, sewing activities and so on are significant and not always captured through these indicators. Inuit Tapiriit Kanatami and Indian and Northern Affairs Canada. (2007d).

Looking for Aboriginal statistics online?

Aboriginal data

are offered in a series of online links that lead you to information about Aboriginal Peoples published by Statistics Canada.



Find the information you need now.

Let www.statcan.gc.ca guide you to Aboriginal data. On the Statistics Canada home Web page you'll find information on:

- → Aboriginal languages
- Childcare
- Education
- Health and well-being
- → Housing
- → Income
- → Labour
- Aboriginal Children's Survey (ACS)
- → Aboriginal Peoples Survey (APS)
- And much more....

Put the data to work.

Link to a host of online products, documents and data. Download data at a push of a button.

It's easy! Bookmark it!

Visit our Web site at www.statcan.gc.ca and click on any of the links located on the left hand side of the Web site home page and let your mouse lead the way!

First Nations,
Métis and Inuit data
at your fingertips!
www.statcan.gc.ca

Here are some of the handy links you'll find on the Statistics Canada Web site home page:

- 1. The Daily
- 2. By subject
 - Aboriginal Peoples
- 3. Census
 - Release Topics
 - · Aboriginal Peoples
 - Data Products
 - Highlight tables (key indicators by topic and geography)
 - · Topic based tabulations
 - 2006 Community profiles
 - · Aboriginal population profile
 - Census tract profiles (neighbourhood statistics)
 - Post-Censal data product
 - 2006 Profile of Aboriginal Children, Youth and Adults
- 4. Anaytical Studies (Aboriginal Survey results)
- 5. Definitions, Data Sources and Methods
 - Questionnaires
 - List by subject
 - Alphabetical list
 Aboriginal Children's Survey (ACS),
 Aboriginal Peoples Survey (APS)
 and Census



General enquiries:

E-mail: sasd-dssea@statcan.gc.ca Toll-free number: 1-800-263-1136

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of Canadian Social Trends explores the social realities that we are dealing with **now**.

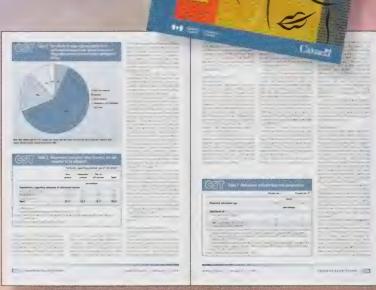
... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



dal Franci

Take advantage of this opportunity today!

Subscribe now by using any one of the following methods: Call toll-free 1-800-267-6677

Fax toll-free 1-877-287-4369

E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the **free** online version of Canadian Social Trends.

renas

Features

Older mothers of young children Seniors and boomers online Social networks: helping others cope Parental benefits and fertility Disabilities:

Kids social paracipation Defining disabilities

\$24 Canada = Catalogue no.11-008 Inter 2009 = No. 88









Editorial Office

E-mail: cstsc@statcan.gc.ca

Fax: 613-951-0387 Write: Editor-in-Chief.

> Canadian Social Trends Statistics Canada

7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

For service to subscribers

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Write: Statistics Canada, Finance, 6-H R.H. Coats Building

150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

How to order Statistics Canada publications

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Online: http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE

Need more information about Statistics Canada products?

E-mail: infostats@statcan.gc.ca

Phone: 1-800-263-1136
Online: www.statcan.gc.ca
TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

SANDOLARI SECIAL TRUES

Features

Older mothers of young children
Seniors and boomers online
Social networks: helping others cope
Parental benefits and fertility

D obiliti

Kids' social participation Defining disabilities

\$24 Canada • Catalogue no. 11-008 Winter 2009 • No. 88







Editorial Office

E-mail: cstsc@statcan.gc.ca

Fax: 613-951-0387 Write: Editor-in-Chief,

Canadian Social Trends

Statistics Canada 7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario

For service to subscribers

K1A 0T6

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Write: Statistics Canada, Finance,

6-H R.H. Coats Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

How to order Statistics Canada publications

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Online: http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE

Need more information about Statistics Canada products?

E-mail: infostats@statcan.gc.ca

Phone: 1-800-263-1136
Online: www.statcan.gc.ca
TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Winter 2009

No. 55



Editor-in-Chief Cara Williams

Senior English Editor Karen Watson

Senior French Editor Marie-Paule Robert

Production Manager and Art Direction

Monique Poirier

Creative ServicesCarol Noël, Jennifer Pfitzer

Publishing Specialists Lyne Bélanger, Chantal Chalifoux

> Marketing Jeff Jodoin, Alex Solis

Associate Editors

Warren Clark, Susan Crompton, Matt Hurst, Leslie-Anne Keown, Derrick Thomas, Martin Turcotte

Review Committee

Jane Badets, Rosemary Bender, Geoff Bowlby, Yvan Clermont, Louise Marmen, Karen Mihorean, Jillian Oderkirk, Georgia Roberts, Grant Schellenberg

Canadian Social Trends

December 2009

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2009

All rights reserved. This product cannot be reproduced and/or transmitted to any person or organization outside of the licensee's organization. Reasonable rights of use of the content of this product are granted solely for personal, corporate or public policy research, or for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from this product. These materials are solely for non-commercial purposes. In such cases, the source of the data must be acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, users shall seek prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6

Indexed in the Academic ASAP, Academic Search Elite, Canadian Periodical Index, Canadian Serials, Expanded Academic ASAP, PAIS International, Periodical Abstracts, Periodical Abstracts Research II, ProQuest 5000, Proquest Research Library and available on-line in the Canadian Business and Current Affairs Database.

ISSN 0831-5698 (Print) ISSN 1481-1634 (Electronic)



Features



3 2008 General Social Survey Report Social networks help Canadians deal with change

by Leslie-Anne Keown

26 Online activities of Canadian boomers and seniors

by Ben Veenhof and Peter Timusk

34 Forty-year-old mothers of pre-school children: A profile

by Mireille Vézina and Martin Turcotte

46 Do parental benefits influence fertility decisions?

by Susan Crompton and Leslie-Anne Keown

55 Living with disability series
Defining disability in the Participation
and Activity Limitation Survey

by Andrew MacKenzie, Matt Hurst and Susan Crompton

63 Living with disability series
Social participation of children with
disabilities

by Krista Kowalchuk and Susan Crompton

GST Standard symbols for Statistics Canada

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- L. use with caution
- F too unreliable to be published

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48 \sim 1984.



2008 General Social Survey Report

Social networks help Canadians deal with change

by Leslie-Anne Keown

GST Overview

- More than four in ten adult Canadians reported a change in their lives in the last twelve months that had a significant impact.
- Types of change, their impact, and how they are handled, all vary by life stage. Young adults experience more and different kinds of major change than seniors.
- At every stage of life Canadians consistently identified family as the most helpful resource for dealing with major change. Other parts of the social network, such as co-workers, friends, professionals and the Internet, are accessed depending on the life stage and the specific type of change.

ocial networks play an important role in modern life. Most Canadians have at least one or two people they are close to and many have a wider network of neighbours, friends, co-workers and other connections from daily activities. However, social networks may take many forms. These networks may include family, friends, neighbours, colleagues, religious and voluntary organizations, community groups, institutions or the Internet. The type of help a network can provide varies. For example, networks can supply goods or services, information, or emotional support. The common characteristic of any component in a social network is that it provides resources or benefits.1

In today's society, families are more widely dispersed and households (as a group) spend more time in paid labour. Moreover, individuals and families rely increasingly on

information technologies in their day-to-day lives. Given these transformations in society, it is important to understand how social networks are accessed during periods of major change.²

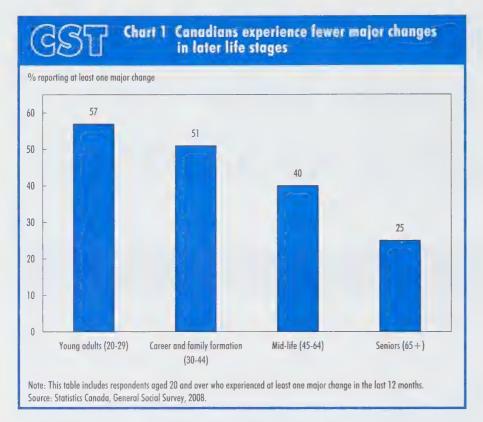
Yet, until now it has not been possible at the national level to get an overall picture of the contribution people's networks make to help them get through periods of major change. To what extent are social networks—people, institutions and sources of information—helping Canadians going through changes such as finances, living arrangements, employment or health?

Whether positive or negative, planned or unplanned, change is hard to ignore. This article will use the 2008 General Social Survey (GSS) to explore the use of social networks to deal with major life changes, looking at: what type of changes Canadians experience; their impacts; and what

parts of their social networks are accessed to deal with change. Since social networks can change over the life course, the article will take a closer look at how they are accessed when going through changes during four broad life periods—young adulthood (aged 20 to 29), career and family formation (30 to 44), mid-life (45 to 64) and later life (65 years and older) (For concepts and definitions, see "What you should know about this study" and "Definitions").

Major change varies by life stage

Change is a frequent occurrence in Canadians' lives. In 2008, more than four in ten Canadians 20 years and older had experienced at least one major change that had a large impact on their lives in the last twelve months (43%). However, the percentage of Canadians experiencing change varied by life stage. Young



adults in their twenties experienced the most change with 57% noting at least one. In contrast, individuals in other life stages were less likely to experience change, with seniors noting the lowest percentage at 25% (Chart 1).

The change of greatest impact also varies by life stage

Of all the major changes that Canadians experienced, respondents were asked to identify the one that had the greatest impact. This article will focus on the change of greatest impact (unless otherwise noted), which shows considerable variation by life stage (Table 1).

Two changes were common to all life stages. The first involved finances, with about 14% of all Canadians 20 years and older indicating this as having the greatest impact on their lives. The second was the death of a loved one, a more common change

GST Table 1 The change experience: An overview by life stage, 2008

	Life stage					
	Overall	Young adults† (aged 20 to 29)	Career and family formation (aged 30 to 44)	Mid-life (aged 45 to 64)	Seniors (aged 65 and over)	
			percentage			
Change of greatest impact						
Finances	14	16	13	15	10*	
Health	15	6	10*	18*	38*	
Death of a loved one	13	7	10	16*	24*	
Employment	14	18	15	14	2 ^E *	
Parenting or child care	11	12	18*	5*	1 E+	
Living arrangements	8	11	9	6*	5*	
Personal achievements	7	9	8	6	4 ^E *	
Family relationships	7	6	7	7	4 E	
Care of a sick or disabled person	5	2 €	3	8*	10*	
Education	4	11	4*	2 ^{*}	Х	
Legal matters	2	٦٤	2	2	J E	
Other	1	Χ	J E	1 {	Х	

[†] reference group

statistically significant difference from the reference group at p < 0.05

Notes: This table includes respondents aged 20 and over who experienced at least one major change in the last 12 months. Due to rounding, percentage totals may not add up to 100.

Source: Statistics Canada, General Social Survey, 2008.

GST What you should know about this study

This article is based on data collected by the 2008 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. In 2008, Cycle 22 of the GSS collected information on social networks, and social and civic participation. Information was also collected on major changes in respondents' lives and the resources they used and needed during these transitions. Respondents' answers reflect their perception of the economic and social situation at the time the information was gathered and this may vary from current perceptions.

The target population of the 2008 GSS included the non-institutionalized population aged 15 and over, living in Canada's ten provinces. Data were collected from February 1, 2008 to November 30, 2008. Over this period, approximately 20,000 individuals were successfully interviewed.

This article only uses respondents who were aged 20 years and older. The analytic sample was composed of over 19,000 respondents representing approximately 25 million Canadians. This article focuses on the 10.9 million Canadians who had experienced at least one change in the last twelve months that had a major impact on their lives.

Methodology

This study uses descriptive statistics and cross-tabular analysis throughout. Differences of statistical significance were determined by non-overlapping confidence intervals using bootstrapped and weighted estimates and variances. Suppression was done where estimates were not reliable. Missing information varied by variable; percentages in each table reflect this.

Note: For further clarification of analytical concepts, please see "Definitions."

in later life stages. Of those who had experienced at least one change in the last twelve months, 24% of seniors had experienced the death of a loved one and had identified it as having the greatest impact compared to 7% of young adults.³

Most young adults experienced many varied changes and transitions throughout all areas of their lives. The changes of greatest impact most often noted were employment, finances, living arrangements, death of a loved one, education, and parenting or childcare. These changes are similar to transitions identified in previous research, such as leaving the parental home and completing post-secondary education.⁴

For those in the career and family formation stage, the most common changes involved two areas of life—economic and personal. On the economic side were finances and employment. Parenting or childcare, death of a loved one and health were most often noted on the personal side.

By mid-life, as could be expected, there is a shift away from parenting or

childcare. The most common personal changes were death of a loved one, health, and care of a sick or disabled person. Economic changes in finances and employment were also common for this life stage.

Amongst seniors, there is greater focus on their health or on the health of someone they are caring for. The most common changes identified were those associated with health, death of a loved one, finances, and care of a sick or disabled person.

The impact and perception of change varies through life stages

Change impacts life in different ways depending on the life stage. In earlier life stages, change was seen by the majority as a positive experience (Table 2). However, fewer than 40% of seniors perceived change as positive.

Respondents were asked about the impact of change on four major life situations: finances, employment, physical health and mental health. There was considerable variation by type of change within each life stage.

Young adults saw their financial situation shift as a result of the change of greatest impact with 21% reporting a worsening situation and 41% reporting an improvement in finances. However for seniors, change had little impact on finances. The employment situation for young adults tended to improve or remain the same because of change, but by mid-life change did not affect the employment situation. Focusing on changes in the area of health, seniors were more likely to report a worsening health situation than their younger counterparts. The majority of respondents reported that their mental health situation remained unchanged regardless of life stage.

Canadians were also asked if they had gained and/or lost personal contacts as a result of the change they experienced. The volatility for those in earlier life stages is also seen here. Young adults were most likely to report that they had gained social contacts as a result of a change compared to those in later life. Of course, a change might also result in losing contacts. Those in earlier

CST 10

Table 2 Impacts of change: An overview by life stage, 2008

	Life stage						
	Overall	Young adults† (aged 20 to 29)	Career and family formation (aged 30 to 44)	Mid-life (aged 45 to 64)	Seniors (aged 65 and over)		
		-	percentage				
Perception of change							
Negative	28	14	22*	38*	55*		
Neither positive nor negative	6	6	5	7	6		
Positive	66	80	72*	55*	39+		
Contacts gained or lost due to change ¹							
Gained	45	55	49*	39*	28*		
Lost	28	31	29	29	16*		
Financial situation due to change							
Worse	27	21	29*	30*	23		
Same	46	38	42	48*	69*		
Better	27	41	29*	22*	8*		
Employment situation due to change							
Worse	15	12	14	18*			
Same	56	46	57*	62*			
Better	29	42	29*	20*			
Physical health due to change							
Worse	21	14	18*	26*	33*		
Same	58	62	61	55*	53*		
Better	20	24	21	19*	14*		
Mental health due to change							
Worse	20	14	20*	23*	21*		
Some	51	50	49	50	64*		
Better	30	36	32	27*	15*		

[†] reference group

Notes: This table includes respondents aged 20 and over who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

life stages were also the most likely to lose social contacts as a result of change, with fewer seniors reporting a loss in social contacts. These findings confirm past research that has suggested that there is more flow in social networks in earlier life and that social networks become more stable in later life stages.⁵

The Internet is useful in dealing with change, but family is the most important resource for all life stages

Major changes that impact our lives often require us to reach beyond ourselves and access various components of our social network to manage or cope with it. Canadians accessed many parts of their social networks to deal with change.

In every life stage, family far outweighed any other part of the social network as the most commonly accessed and most helpful resource (Table 3).

Close friends were commonly accessed resources across all life stages. Professionals, such as doctors and lawyers, were also used, especially by seniors. Co-workers, other friends, media resources and business people were reported as common social network resources. These types of

social network resources were less likely than family to be cited as the most helpful resource.

The Internet deserves special note, given the increasing role of this resource in gathering information and enhancing personal contact through such activities as e-mail and social networking. The Internet was used by 39% of adult Canadians to help deal with change. However, it declined steeply as a social resource across the life stages. Between 47% and 50% of those in the young adult and the career and family formation stage noted that they had used the Internet to deal with change, versus

 $^{^{\}star}$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.



Table 3 Resources used to deal with change: An overview by life stage, 2008

	Life stage						
	Overall	Young adults† (aged 20 to 29)	Career and family formation (aged 30 to 44)	Mid-life (aged 45 to 64)	Seniors (aged 65 and over)		
			percentage				
Type of resource used ¹							
Family	69	75	68*	65*	68*		
Close friends	59	64	61	56*	49*		
Professionals (including doctors)	45	36	46*	48*	58*		
Internet	39	50	47	31*	11*		
Co-workers	36	36	44*	37	5*		
Other friends	35	34	39	35	28*		
Other media/information sources	34	36	39	31	22*		
Business people (including employer)	32	33	35	33	12*		
Neighbours	23	15	23*	25*	34*		
Social service or health organization	21	17	22*	22*	25*		
Government resources (all levels of government)	16	17	19	14	10*		
Public institutions (for example, libraries or universities	13	25	13*	8*	4 ^E *		
Religious organization	11	9	11	13*	16*		
Law or justice organization	6	4	7*	7*	3 E		
Other community organization	6	5 E	7	6	6		
Most helpful resource in dealing with change	e ²						
Family	44	52	42*	39*	43*		
Professionals (including doctors)	14	6	12*	18*	26*		
Close friends	11	12	13	11	8		
Internet	7	8	9	6	Χ		
Business people (including employer)	4	3 ^E	4	4	Х		
Social service or health organization	4	2 ^E	3	6*	8 ^E *		
Government resources (all levels of government)	3	4 ^E	3	3	2 [

t reference group

* statistically significant difference from the reference group at p < 0.05

1. Respondents could report more than one type of resource to deal with the change of greatest impact.

2. Only the most commonly identified resources are shown. Only those identifying at least one resource are included.

Note: This table includes respondents aged 20 and over who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

31% of those in mid-life and 11% of seniors.

Regardless of life stage, the Internet was seldom noted as the most helpful resource. Family was clearly the most helpful resource in individuals' social networks. While the Internet may be a valuable tool in Canadians' lives, it shows no signs of replacing the importance of people—at least in dealing with change.

Social networks provide varied types of help

Family, friends, professionals and the Internet may all be tapped to deal with change but what kind of help do they provide? Help drawn from the social network is often categorized into three broad types of support: emotional, instrumental (e.g. assistance or support with finances, transportation, or the provision of goods or services), and informational (e.g. informal advice, information, training or referrals).⁷

Canadians use all three types of support almost equally, varying little by life stage. The only exception is that informational help is less commonly accessed by those in the mid-life and senior life stages (Table 4).

The following sections show more detailed analysis by life stage.

GST Life stages

Rather than discussing generations, it is often helpful to discuss the different stages of life. The following life stages were chosen after taking into account the data available in the GSS 2008.

Young adults: (Aged 20 to 29) The data show a fair amount of variability for the 15 to 19 year age group with regard to change. There is, however, more uniformity in the 20 to 29 year age group, allowing the focus to be on strategies to cope with change rather than on the change itself.

Career and family formation: (Aged 30 to 44) This life stage includes those focusing on raising families and/or advancing careers.

Mid-life: (Aged 45 to 64) Commonly referred to as Boomers but renamed to reflect life stage.

Seniors: (Aged 65 and over) This life stage includes many who are retired.

GST

Table 4 Type of help received to deal with change: An overview by life stage, 2008

	Life stage						
	Overall	Young adults† (aged 20 to 29)	Career and family formation (aged 30 to 44)	Mid-life (aged 45 to 64)	Seniors (aged 65 and over)		
			percentage				
Type of help received ¹							
Emotional	66	66	65	67	68		
Instrumental help (at least one of the							
types below)	66	67	67	64	70		
Professional services or expertise	46	37	46*	48*	58*		
Financial	26	41	27*	19*	9*		
Help with household work or childcore	19	14	23*	15	24*		
Transportation	13	12	11	12	25*		
Material goods	11	12	13	9	11		
Personal care or health needs	10	5	8*	12*	20*		
Informational help (at least one of the							
types below)	62	71	68	57*	38*		
Information or informal advice	57	64	62	53*	35*		
Referrals, networking or help making new contacts	14	17	15	13*	6*		
Teaching, coaching, or training	9	14	11	7*	3 ^E *		

[†] reference group

statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of help received to deal with the change of greatest impact.

Note: This table includes respondents aged 20 and over who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

Young adults: Major changes, transitions, and information

- Young adults experience numerous and different types of change.
- Employment was the most common change of greatest impact experienced by young adults (18%), followed by finances (16%) and parenting or childcare (12%).
- Young adults access many types of resources to deal with change. The resources vary in important ways by the type of change being experienced.

About 4.5 million Canadians were young adults (aged 20 to 29 years old) in 2008 and 57% had experienced at least one major change in the last twelve months. The changes of greatest impact revolve around the transitions this group commonly experiences—in finances, employment, education, living arrangements and parenting or child care. No one type of change dominates

Young adults often see change as positive

Overall, young people reported changes as positive. The most positively perceived changes involved parenting or childcare, or education (Table 5). The type of change reported influences different aspects of life. For instance, in 2008 the financial situation of the young adult was better when the change involved finances or employment (67%). The financial situation was reported as worse when it involved parenting or childcare (39%) or education (33%).

Young adults' social networks are fluid: Change both expands and contracts the number of social contacts

Transition involves change in the young person's life, and also involves their social networks. At this stage, social contacts are fluid in the face of change with contacts being both gained and lost. While change may produce many new social contacts

it may also involve others falling away. The magnitude of this gain/loss varies by the type of change reported. Many of those whose change involved employment reported a gain in social contacts, more than one and a half times those whose change of greatest impact involved finances (72% versus 44%). Employment changes often also meant a loss in social contacts (44%) and a similar percent noted a loss in social contacts when the change involved living arrangements. Other changes produced a smaller loss in social contacts.

Young adults use an array of resources to deal with change but family is the most helpful

Young adults accessed these fluid social networks to deal with change (Table 6). The type of resource varied by type of change. When finances were involved, the resources used most often were family, business people (including employers), and the Internet. When employment was the change of greatest impact, similar resources were tapped but close friends also played an important role.

Changes involving living arrangements, education and parenting or childcare also showed increased utilization of friends as a resource. The Internet was used for all types of changes but showed particular importance for parenting or childcare, and education. The Internet was often used as a resource but was seldom reported as the most helpful.

Co-workers were important when dealing with changes involving employment. Government resources, at all levels of government, were used more commonly when the change involved employment, education, and parenting or childcare.

However, young adults saw their families as the most helpful resource in their social network. Across all types of change, family was the most helpful resource for 39% to 75% of young adults, depending on the type of change. Close friends were cited second as the most helpful resource for young adults across all types of change (12%) (Results not shown).

The type of help needed from the social network varies by the change being experienced

Family is the most helpful resource in the social network, but the type of help used from all parts of the social network does vary. When change involved education and parenting or childcare, and to a lesser extent finances, instrumental and informational help were accessed more often than emotional support (Table 7). If employment was involved, informational support was the most common type of help, with emotional and instrumental support being sought less often. If the change involved living arrangements, 81% of young adults sought instrumental support, while emotional and informational support were important but less commonly accessed.

Table 5 Impacts of change: Young adults (aged 20 to 29), 2008

	Change of greatest impact				
	Finances†	Employment	Education	Living arrangements	Parenting or childcare
			percentage		
Perception of change					
Negative	Х	Х	Х	13 ^E	Х
Neither positive nor negative	Х	Х	Х	16 ^E	Χ
Positive	72	83	92*	71	91*
Contacts gained or lost due to change ¹					
Gained	44	72*	69*	62	54
Lost	20	44*	39*	46*	21 ^E
Financial situation due to change					
Worse	16 ^E	20 ^E	33*	17 ^E	39*
Same	17 ^E	13 ^f	31	37*	46*
Better	67	67	36*	46*	15 ^E *
Employment situation due to change					
Worse	9 E	14 ^E	11 E	Χ	17 ^E
Same	29	12 ^E *	39	50*	66*
Better	62	75*	50	Х	17 ^{E*}
Physical health due to change					
Worse	11 [18 ^E	Х	Х	15 [£]
Same	66	50	68	69	73*
Better	23	32	Х	Х	13 ^E *
Mental health due to change					
Worse	13 [£]	12 ^E	Х	11 ^E	12 ^E
Same	52	47	58	55	65
Better	35	41	Х	33	23 ^E

[†] reference group

Notes: This table includes respondents aged 20 to 29 who experienced at least one major change in the last 12 months. Due to rounding, percentage totals may not add up to 100. Source: Statistics Canada, General Social Survey, 2008.

GST Interrelated changes

Major change is often interrelated

The 2008 GSS shows that changes can be interrelated. Of Canadians that had experienced at least one major change in the last 12 months, 51% reported that other changes were interrelated with the change of greatest impact. Most commonly this interconnectivity of change was seen in the earlier stages of life and declined in later life. For instance, more than half of young adults reported a change that was interrelated to the change of greatest impact, compared to one quarter of seniors (60% versus 26%).

Some types of change are often intertwined. The interrelationship involving finances and employment is the most common. Except for seniors, the majority of respondents who reported finances as a change of greatest impact said that a change in employment was interrelated. The reverse was also true—a change of employment was related to a change involving finances.

Of note for those in midlife and for seniors: If the change of greatest impact was the care of a sick or disabled person, two changes were commonly related—finances and the person's own health.

 $^{^{*}}$ statistically significant difference from the reference group at p $\,<\,0.05$

^{1.} Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.



Table 6 Resources used to deal with change: Young adults (aged 20 to 29), 2008

	Change of greatest impact						
	Finances†	Employment	Education	Living arrangements	Parenting or childcare		
			percentage				
Type of resource used ¹							
Family	62	67	77	81*	87*		
Business people (including employer)	35	42	28	28	32		
Internet	40	48	68*	51	62*		
Close friends	32	52*	58*	81*	73*		
Other media/information sources	23	33	40	32	65*		
Co-workers	22 ^E	45*	32 ^E	27	36		
Professionals (including doctors)	17 ^E	24	23 ^E	34*	67*		
Government resources (all levels of government)	14 ^E	21	26 ^E	13 ^E	28*		
Public institutions (for example, libraries or universities)	10 ^E	28*	75*	Х	18 [£]		
Other friends	11 E	27*	29 ^E *	45*	37*		
Social service or health organization	5 ^E	Х	Х	Х	53*		
Neighbours	Х	6 ^E	X	15 ^{E*}	34*		

[†] reference group

Note: This table includes respondents aged 20 to 29 who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008

CST

Table 7 Type of help received to deal with change: Young adults (aged 20 to 29), 2008

		Change of greatest impact				
	Finances†	Employment	Education	Living arrangements	Parenting or childcare	
			percentage			
Type of help received ¹						
Emotional	36	56*	72*	68*	72*	
Instrumental ²	65	51	81	18	87*	
Informational ³	58	80*	86*	69	83*	

[†] reference group

Source: Statistics Canada, General Social Survey, 2008.

^{*} statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of resource to deal with the change of greatest impact.

^{*} statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of help received to deal with the change of greatest impact.

^{2.} Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.

^{3.} Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training.

Note: This table includes respondents aged 20 to 29 who experienced at least one major change in the last 12 months.

Career and family formation life stage: Dealing with change on two sides of life

- In the career and family formation life stage, major change mainly impacts the personal and economic sides of life
- The Internet is a social resource often used by those experiencing a change in parenting or childcare and health.
- Informational support is an important form of help in this life stage.

In the career and family formation stage of life (aged 30 to 44 years) people start to focus on family (including raising children) and/or establishing and advancing their career. This focus is evident in the changes that people in this stage of life report. In 2008, there were about 7.1 million Canadians in this stage of life and 51% had experienced at least one type of major change.

The change of greatest impact in this life stage is in either of two categories: economic or personal. On the economic side, changes of greatest impact noted most often were in finances (13%) and employment (15%). On the personal side, 18% of individuals in this life stage experienced change involving parenting or childcare and identified it as having the greatest impact, while another 10% did so with regard to their health.

Health changes are seen as both positive and negative

In 2008, changes on the economic side of life were generally perceived as positive (Table 8). On the personal side of life, perceptions varied. If the change of greatest impact involved health, 51% of people in the career and family formation stage noted the change was negative. When the change involved parenting or childcare, it was overwhelmingly seen as a positive one (88%) possibly reflecting the growth of families in this life stage.

The impact on various aspects of the respondent's life varied by the type of change involved. Changes of greatest impact involving the economic side of life tended to result in improved financial and economic situations and to leave physical and mental health unaltered or better.

If the change of greatest impact was health, then the financial and employment situation for the respondent largely remained the same. However, 47% of these 30- to 44-year-olds indicated their physical health was worse, and 30% reported their mental health was worse. If the change of greatest impact involved parenting or childcare, other situations in life tended to remain stable.

The Internet is often drawn upon as a resource by those experiencing changes with parenting or childcare and health

For those in the career and family formation stage, family is often the most drawn upon and is the most helpful part of the social network, regardless of the type of change experienced (Table 9). Other parts of the social network accessed vary by type of change.

Business people (including employers) were the most helpful resource for 34% of individuals whose change of greatest impact involved finances. Co-workers were resources for 53% of those impacted by changes involving employment. People in this life stage also turned to the Internet as a resource. Those dealing with changes in parenting or childcare turned most often to family, but also accessed close friends. professionals, the Internet and other media sources.

In 2008, 85% of those experiencing health changes turned to professionals (including doctors), the family (76%), close friends (67%) and the Internet (60%). Those experiencing a change involving parenting or childcare also used the Internet fairly often (61%).

Informational support was important to those in the career and family formation life stage

The kind of help drawn from social resources varied for those in the career and family formation stage of life (Table 10). Changes involving the personal side of life needed all three types of help. Informational support was important regardless of the type of change and played a particularly important role when employment or parenting or childcare was the change of greatest impact. Emotional and instrumental support was sought more often when the change was on the personal side of life.

Table 8 Impacts of change: Career and family formation life stage (aged 30 to 44), 2008

Change of greatest impact				
Finances†	Employment	Health	Parenting or childcare	
	perc	entage		
35	16*	51*	8 ^{E*}	
5€	8 E	Х	5 E	
60	76*	Х	88*	
36	66*	34	54*	
25	49*	23	20	
32	24	37	42	
13	22*	54*	49*	
56	53	10 ^E *	9 ^E *	
16	17	22	13	
40	16*	69*	76*	
44	67*	9E*	11*	
13	14	47*	17	
66	54	18 ^E *	72	
21	32*	35*	11*	
18	15	30*	15	
51	40	36*	64*	
31	44*	35	21	
	35 5 ^E 60 36 25 32 13 56 16 40 44 13 66 21	Finances† Employment percentage 35	Finances† Employment Health percentage 35	

[†] reference group

Notes: This table includes respondents aged 30 to 44 who experienced at least one major change in the last 12 months. Due to rounding, percentage totals may not add up to 100. Source: Statistics Canada, General Social Survey, 2008.

GST

When faced with the death of a loved one, people mostly turn to family for support

Just over one in ten Canadians aged 20- to 64-years-old experienced the death of a loved one and noted it as the major change of greatest impact. Of this group, 38% reported other related changes in their lives. Overall, the death of a loved one did not significantly influence other life situations, such as finances, employment or physical health, but 27% said their mental health situation got worse (Table A.2).

Most people who reported death of a loved one as their change of greatest impact turned to their social networks for emotional support (95%). The majority reported that family was their most helpful resource. Family and close friends were drawn upon most frequently, while co-workers, other friends, neighbours and business people were also accessed as sources of help through this change.

 $^{^{\}star}$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.

Table 9 Resources used to deal with change: Career and family formation life stage (aged 30 to 44), 2008

	Change of greatest impact					
	Finances†	Employment	Health	Parenting or childcare		
		perc	entage			
Type of resource used ¹						
Family	42	52	76*	84*		
Business people (including employer)	34	41	31	32		
Internet	26	46*	60*	61*		
Close friends	26	49*	67*	71*		
Other media/information sources	22	30	43*	62*		
Co-workers	18	53*	46*	44*		
Professionals (including doctors)	20	24	85*	66*		
Other friends	13	31*	38*	48*		
Government resources (all levels of government)	14	23*	15	33*		
Neighbours	7 ^E	12 ^E	20*	36*		
Public institutions (for example, libraries or universities)	6 €	14*	6 ^E	19*		
Social service or health organization	9 E	7 ^E	32*	51*		
Religious organization	4 E	Х	116*	13*		
Other community organization	Х	4 ^E	Х	13*		

t reference group

Note: This table includes respondents aged 30 to 44 who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

GST

Table 10 Type of help received to deal with change: Career and family formation life stage (aged 30 to 44), 2008

Change of greatest impact					
Finances†	Employment	Health	Parenting or childcare		
percentage					
33	54*	77*	70*		
56	48	89*	87*		
49	76*	73*	81*		
	33 56	Finances† Employment perco	Finances† Employment Health percentage 33 54° 77° 56 48 89°		

[†] reference group

Source: Statistics Canada, General Social Survey, 2008.

 $[^]st$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of resource to deal with the change of greatest impact.

 $^{^{\}star}$ statistically significantly different from the reference group at p < 0.05

^{1.} Respondents could report more than one type of help received to deal with the change of greatest impact.

^{2.} Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.

^{3.} Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training.

Note: This table includes respondents aged 30 to 44 who experienced at least one major change in the last 12 months.

Mid-life stage: Dealing with changes in health

- People in mid-life reported that major changes on the personal side of life were dominated by dealing with one's own health or with someone else's health through care for a sick or disabled person.
- Instrumental help is especially important when the change was on the personal side.
- Of those in midlife noting a change involving health, 56% perceive that change as negative.

As Canadians move from starting and building careers and families into mid-life, the focus often shifts from children to other aspects of life. In mid-life, the pace of change in life for Canadians begins to slow down. Of approximately 9 million Canadians in mid-life (aged 45 to 64 years) in 2008, 40% had experienced at least one major change in the last twelve months. This is less than in the stages of young adults and of career and family formation.

The nature of the changes experienced by those in mid-life also shifts, particularly on the personal side of life. The two types of personal change, besides death of a loved one (16%), that are most prevalent involve health—a change in the respondent's health (18%), or a change in the care of a sick or disabled person (8%). On the economic side, a change in finances (15%) or a change in employment (14%) was the most common change of greatest impact.

When health is the change of greatest impact it is often perceived as negative

In 2008, the perception of change on the economic side during midlife varied depending on the type of change experienced. Individuals in mid-life were fairly evenly divided in how they felt about a change in finances—50% thought the change was negative while 45% thought the change was a positive one (Table 11). Those, who in 2008 reported a change in the past 12 months in employment, tended to see the change as a positive one (66%).

Turning to the personal side of life, changes in the respondent's health were more often seen as negative (56%). When the change involved care of a sick or disabled person, individuals in mid-life were more diverse in their perceptions about the direction of change—49% felt the change was negative, 35% thought the change was positive while 16% indicated the change was neither positive nor negative.

Major change in mid-life does not appear to impact important aspects of life unduly. With financial change, just over one third indicated their financial situation was better because of it (39%). An almost equal percent indicated that their financial situation was worse (41%). A change in finances tended to leave the employment, physical health, and mental health situations of the respondent the same as before. The pattern observed for finances in 2008 was similar to the one for employment. The one exception was where a change in employment tended to improve the overall employment situation.

In mid-life when the respondent's health was the change of greatest impact, their employment and financial situation tended to remain unchanged. However, almost half noted that their physical health was worse and over one quarter also noted worsening mental health (49% and 30%). When the change of greatest impact was in the care of a sick or disabled person, other aspects of the respondent's life appeared to remain unchanged.

Professionals (including doctors) are important resources in the social network when change is on the personal side of life

Canadians in mid-life drew on many resources in their social networks to deal with change. When the change of greatest impact was financial, individuals most often turned to family, business people, close friends, Internet and other media for support. Family was largely seen as the most helpful resource (35%) (Results not shown).

When the change of greatest impact was employment, the most commonly accessed resources were family, close friends, co-workers, and business people. Once again, family was usually cited as the most helpful resource (29%). Co-workers were cited by 12% as the second common most helpful resources (Results not shown).

When the change of greatest impact involved health or care of a sick or disabled person, professionals and family were commonly accessed parts of the social network (Table 12). The third most commonly accessed resource was close friends for those noting a change in health. Of those noting a change involving care of a sick or disabled person, 65% noted that they had turned to a social service or health organization. Family and professionals were often cited as the most helpful resource when the change of greatest impact revolved around health or care of a sick or disabled person (Results not shown).

Instrumental help was used most often when the change of greatest impact was on the personal side of life

In mid-life, the type of help received from the resources of the social network varied depending on the type of change experienced (Table 13). For those in this group who stated the change of greatest impact was financial, 53% required instrumental help, 41% informational help, and 36% emotional support. When the change involved employment, informational help was used by 72% (For clarification of analytical concepts, see "Definitions").

On the personal side of life, instrumental help was needed by most people with a change in health and in the care of a sick or disabled person (91% and 87%). Emotional and informational supports were also used by the majority of those experiencing one of these two types of change.

GST

Table 11 Impacts of change: Mid-life stage (aged 45 to 64), 2008

	Change of greatest impact				
	Finances†	Employment	Health	Care of a sick or disabled person	
		perc	entage		
Perception of change					
Negative	50	27*	56	49	
Neither positive nor negative	4 ^E	7 [£]	6 E	16 ^E *	
Positive	45	66*	38	35	
Contacts gained or lost due to change ¹					
Gained	24	54*	35*	46*	
Lost	24	49*	31	25	
Financial situation due to change					
Worse	41	38	38	Χ	
Same	20	27	55*	66*	
Better	39	35	7 ^E *	Χ	
Employment situation due to change					
Worse	27	31	30	Х	
Same	45	17*	64*	78*	
Better	29	52*	7 ^E *	Х	
Physical health due to change					
Worse	23	19	49*	Χ	
Same	58	51	20*	64	
Better	19	30*	31*	χ	
Mental health due to change					
Worse	22	14	30	38*	
Same	50	45	43	52	
Better	29	41*	28	10 ^E *	

t reference group

Notes: This table includes respondents aged 45 to 64 who experienced at least one major change in the last 12 months. Due to rounding, percentage totals may not add up to 100. Source: Statistics Canada, General Social Survey, 2008.

statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.

Table 12 Resources used to deal with change: Mid-life stage (aged 45 to 64), 2008

		Change of greatest impact					
	Finances†	Employment	Health	Care of a sick or disabled person			
		perc	entage				
Type of resource used ¹							
Family	41	54*	76*	76*			
Business people (including employer)	31	47*	27	19*			
Close friends	29	48*	64*	53*			
Other media/information sources	23	33	38*	34			
Professionals (including doctors)	24	27	87*	75*			
Internet	19	37*	44*	33*			
Co-workers	17	44*	34*	30*			
Government resources (all levels of government)	14	19	15	24*			
Other friends	13	29*	38*	30*			
Neighbours	10 ^E	11	33*	35*			
Social service or health organization	9 ^E	7 E	35*	65*			
Religious organization	5 ^E	4 E	14*	15 ^E *			

t reference group

Note: This table includes respondents aged 45 to 64 who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

CST

Table 13 Type of help received to deal with change: Mid-life stage (aged 45 to 64), 2008

	Change of greatest impact				
	Finances†	Care Finances† Employment Health disa			
	percentage				
Type of help received ¹					
Emotional	36	56*	79*	73*	
İnstrumental ²	53	50	91*	87*	
Informational ³	41	72*	68*	66*	

[†] reference group

 $[^]st$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of resource to deal with the change of greatest impact.

 $^{^{*}}$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of help received to deal with the change of greatest impact.

^{2.} Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.

^{3.} Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training.

Note: This table includes respondents aged 45 to 64 who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

Seniors: Relying on professionals, family and close friends to deal with change

- Fewer major changes were reported by those in later life.
- Seniors often perceive change as negative, but it does not greatly impact finances or mental health
- Seniors rely on professionals (including doctors) especially when change involves health. Family and close friends are also important resources.

Fewer changes were reported by those in later life. In 2008, there were approximately 4.3 million seniors (65 years and older) and a quarter of them had experienced at least one major change. Except for finances, change in the senior's life is concentrated mostly on the personal side of life. The most common changes of greatest impact were related to health (38%), death of a loved one (24%), finances (10%), and care of a sick or disabled person (10%).

Seniors often perceive change as being in a negative direction

Many seniors saw the change in their lives as negative (Table 14). However, if the change of greatest impact was noted as involving health, death of a loved one, or care of a sick or disabled person then the financial and mental health situations in their lives remained the same as before the change. In 2008, a change in finances tended to leave the financial situation worse than before but left other aspects of life unchanged. A change involving health often resulted in a

worse physical health situation than before (51%).

Care of a sick or disabled person may increase the social connectedness of seniors

Seniors' social networks do not appear to fluctuate—they seldom report either a loss or gain in social contacts due to the change of greatest impact. There is one notable exception. When the change involved the care of a sick or disabled person, 52% of seniors reported a gain in social contacts. This finding confirms previous work that found that some life-course factors and events increase the social connectedness of seniors. 8

Professionals are a vital part of the senior's social network when health changes or involves the care of a sick or disabled person

Family forms the nexus of the social network for seniors especially when the change in their lives revolves around the death of a loved one (Table 15). Close friends also act as a

resource in these circumstances. On the economic side, there is no one dominant resource that is used in dealing with a change in finances.

If the change in the senior's life concerns their own health or the care of a sick or disabled person, professionals are often tapped as a resource along with family and close friends. Social service or health organizations are often used in care of a sick or disabled person. Seniors seldom turned to the Internet as a resource to deal with change.

Instrumental help was commonly used with change involving health or care of a sick or disabled person

Seniors utilized different forms of help from their social networks depending on the type of change they experienced (Table 16). The death of a loved one most commonly involved emotional support. For changes in health or in the care of a sick or disabled person, seniors used the social network for instrumental and emotional support. Informational help was less commonly sought in all types of change.

Table 14 Impacts of change: Seniors (aged 65 and over), 2008

	Change of greatest impact			
	Finances†	Death of a loved one	Health	Care of a sick or disabled person
		perc	entage	
Perception of change				
Negative	62		64	62
Neither positive nor negative	Х		6 E	Х
Positive	Х		30	Χ
Contacts gained or lost due to change ¹				
Gained	15 ^E	20	22	52*
Lost	12 ^E	13	15	18E
Financial situation due to change				
Worse	61	13*	Х	Х
Same	17 ^E	80*	80*	77*
Better	23 ^E	7 ^E *	Χ	Х
Physical health due to change				
Worse	Х	14	51*	Х
Same	67	80	27*	53
Better	X	6 E	22	Х
Mental health due to change				
Worse	22 ^E	19	23	Х
Same	66	75	63	58
Better	12 ^E	6 E	13 ^E	X

[†] reference group

Notes: This table includes respondents aged 65 years and over who experienced at least one major change in the last 12 months. Due to rounding, percentage totals may not add up to 100

Source: Statistics Canada, General Social Survey, 2008.

GST Women use social networks differently than men

Men were slightly more likely than women to feel that the major change with the greatest impact involved employment or finances. For women, the type of change that they noted as having the greatest impact was more likely to involve health or death of a loved one.

Men and women were quite different in how they used their social networks to deal with change. Women were between 7 and 9 percentage points more likely than men to use family, friends or professionals (e.g. doctors, lawyers). They were also more likely than men to indicate that family was their most helpful resource. Men, on the other hand, were more likely to indicate that business people, including their employer, had been their most helpful resource. They were also less likely than women to seek emotional and instrumental support (Table A.1).

^{*} statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.

Table 15 Resources used to deal with change: Seniors (aged 65 and over), 2008

Change of greatest impact			
Finances†	Death of a loved one	Health	Care of a sick or disabled person
	perc	entage	
27 ^f	80*	77*	73*
21 [£]	17	4 ^E *	Х
15 [[]	12 ^E	28	21 [{]
19 ^E	28	91*	67*
18 ^E	6 ^E *	8 E	15 E
Х	65*	53*	41*
X	41*	38*	44*
X	38*	26*	28 ^E *
X	27*	14	15 E
Х	10 ^E	35*	65*
X	Х	13	Х
	27 ^f 21 ^f 15 ^f 19 ^f 18 ^f x x	Peath of a loved one 27 ^E 80° 21 ^E 17 15 ^E 12 ^E 19 ^E 28 18 ^E 6 ^{E*} x 65° x 41° x 38° x 27°	Death of a Ioved one Health

[†] reference group

Note: This table includes respondents aged 65 and over who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

GST

Table 16 Type of help received to deal with change: Seniors (aged 65 and over), 2008

		Change of greatest impact		
	Finances†	Death of a loved one	Health	Care of a sick or disabled person
		percentage		
Type of help received ¹				
Emotional	21 [£]	84*	73*	73*
Instrumental ²	50	39	95*	92*
$Informational^3\\$	28€	17	45*	51

reference group

Source: Statistics Canada, General Social Survey, 2008.

 $[^]st$ statistically significant difference from the reference group at p < 0.05

^{1.} Respondents could report more than one type of resource to deal with the change of greatest impact.

statistically significant different from the reference group at p < 0.05

^{1.} Respondents could report more than one type of help received to deal with the change of greatest impact.

^{2.} Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.

^{3.} Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training.

Note: This table includes respondents aged 65 and over who experienced at least one major change in the last 12 months.

Summary

Major change, whatever its type, is a feature of modern life for many Canadians. Dealing with change means tapping into social networks and using them in various ways. The 2008 GSS showed that Canadians' life stage affected their change experience, the resources of the social network they used, and the type of help they received from those resources.

Though the Internet is often tapped for help, it is people, particularly family, that remain the most helpful resources in social networks.

Young adults (aged 20 to 29) experience considerable levels of change reflecting the many transitions typically experienced in this stage of life. They view change as a positive experience for the most part and use many parts of their fluid social networks to deal with change, with family being the most helpful resource.

Those in the career and family formation stage of life (aged 30 to 44) are dealing with changes both in the economic and personal sides of life. Social network resources such as family and friends are often tapped to deal with change. Instrumental help is often valued, especially when the change of greatest impact involves parenting or childcare and health.

In the mid-life stage (aged 45 to 64), change becomes a somewhat less common experience. Changes on the personal side of life are dominated by health—either the individual's own health or someone else's. Instrumental help is often drawn from the social network especially with changes in the personal side of life.

Seniors (aged 65 and older) experience the least amount of change. Change is seen as negative but does not greatly impact other areas of life such as finances or physical health. Reliance on professionals within the social network becomes pronounced at this life stage. Family and close friends were also important resources.



Leslie-Anne Keown is a social science researcher with *Canadian Social Trends*.

- Lin, N. (2001). Social capital: A theory of social structure and action. New York: Cambridge University Press.
 - Putnam, R. (2000). Bowling alone: The collapse and revival of American Community. New York: Simon & Schuster.
- 2. Lin. (2001); Putman. (2000).
- 3. Change involving death of a loved one will be dealt with in a box for all life stages except seniors for seniors it will be handled in the section on seniors. This is because previous research has indicated that in earlier life stages this change is dealt with in a common way, but amongst seniors this change has a different impact
- and is handled differently (Cornwell, Laumann, and Schumm, 2008; Torges, Stewart, and Nolen-Hoeksema, 2008).
- Cornwell, B., Laumann, E. O., and Schumm, L. P. (2008). The social connectedness of older adults: A national profile. *American Sociological Review*, 73(April), 185-203.
- Torges, C., Stewart, A., and Nolen-Hoeksema, S. (2008). Regret, resolution, aging, and adapting to loss. *Psychology and Aging*, 23(1),169-180.
- Clark, W. (2007). Delayed transitions of young adults. Canadian Social Trends, 84, 13-21. Statistics Canada Catalogue no. 11-008.

- 5. Cornwell, Laumann, and Schumm. (2008).
- Veenhof, B. (forthcoming). Online activities of Canadian boomers and seniors. Canadian Social Trends. Statistics Canada Catalogue no. 11-008.
- McColl, M. A., Lei, H., and Skinner, H. (1995). Structural relationships between social support and coping. Social Science Medicine, 41(3), 395-407.
- 8. Cornwell, Laumann, and Shumm. (2008).

GST Definitions

Change: Respondents were asked:

Which of the following changes, either positive or negative, have you experienced during the past 12 months? Have you experienced changes to do with:

- ... finances or income?
- .. employment?
- ... health?
- ... parenting or childcare?
- ... home care of a sick or disabled person?
- ... death of a loved one?
- .. education?
- ... legal matters?
- ... living arrangements (for example, moving to a new house, moving in with another family member, a change of responsibilities within the household)?
- .. family relationships?
- . personal achievements?
- ., any other change?

Major change: Respondents were asked to identify the impact of the identified change on a scale of one to five with one denoting very little impact and five indicating a very large impact. Those who indicated an impact score of 4 or 5 were considered to have experienced a major change for the purposes of this study.

Major change of greatest impact: For respondents who identified only one type of major change, it was treated as the change of greatest impact on their life. Respondents with two or more major changes were asked to identify the one that had the greatest impact.

Two groupings of change were used in this article for some life stages:

Economic changes were changes in finance and employment.

Personal changes could include changes in parenting or childcare, health, care of a sick or disabled person, and death of a loved one.

Social network: Social networks are the people, institutions, and resources that individuals interact with for information, support, and relationships of all types. To identify the resources used to deal with the change of greatest impact, respondents were asked: "Did you get help from: family, close friends, friends other than close friends, co-workers, neighbours, local government resources, other government resources, business people, professional people, a public

institution, a social service or health organization, a law or justice organization, a religious organization, another community organization, the Internet, other information or media resources, any other type of resource?" The respondent was then asked to identify which of these resources was the most helpful.

Help received from the social network: For each type of social network resource identified, respondents were asked to identify the type of help received. Possible types of help were emotional or moral support, financial support, material goods or gifts, transportation or running errands, professional services or expertise, information or informal advice, help with household work, home maintenance or child care, help with personal care or health care needs, referrals, networking, or making new contacts, teaching, coaching, or training, support for political action, and other.

Three groupings of type of help were used for the purpose of this article:

Emotional help included the help concerning emotional or moral support.

Instrumental help included at least one of the following: financial support, material goods or gifts; transportation or running errands; professional services or expertise; help with household work, home maintenance or child care; and help with personal care or health care needs.

Informational help included at least one of the following: referrals, networking, or making new contacts; teaching, coaching, or training; and support for political action.

Perception of change: Respondents were asked: "Do you think this change has been more positive or negative?" There were 5 possible answer categories which were collapsed to three for the analysis—positive (includes "positive" and "from negative to positive"), negative (includes "negative" and "from positive to negative"), and neither positive nor negative.

Impact on important life aspects: Respondents were asked about the state of important life aspects as a result of the change of greatest impact. The aspects examined were: financial, employment, physical health and mental health situations. They were given five possible response categories. For this analysis, the response categories were collapsed into three—better, same, and worse. This question was not asked of those who identified death of a loved one as a change of greatest impact, and these respondents are coded as missing when this variable is used.



GST Table A.1 Gender overview

	Women†	Men		Women†	Men
	percen	tage		percer	ıtage
Experienced any major change in the last 12 months	47	40*	Business people (including employer)	30	34*
Change of greatest impact ¹			Neighbours	25	20*
Employment	12	17*	Social service or health organization	23	18*
Finances	12	17*	Government resources (all levels of government)	16	17
Health	17	12*	Public institutions (for example, libraries or universities) 13	14
Death of a loved one	14	11*	Religious organization	13	9
Parenting or child care	10	11	Law or justice organization	6	5
Care of a sick or disabled person	6	4	Other community organization	7	5
Perception of change			Most helpful resource in dealing with chang	e ⁴	
Negative	30	26*	Family	46	41
Neither positive nor negative	7	5*	Professionals (including doctors)	14	13
Positive	63	69*	Close friends	11	12
Contacts gained or lost due to change ²			Internet	6	8
Gained	44	46	Business people (including employer)	3	5
Lost	28	29	Government resources (all levels of government)	3	3
Type of resource used ³			Type of help received ⁵		
Family	72	65*	Emotional	71	60
Close friends	63	54*	Instrumental ⁶	68	63
Professionals (including doctors)	49	40*	Informational ⁷	62	63
Internet	39	39	Financial situation worse due to change	28	25
Co-workers	37	35	Employment situation worse due to change	16	13
Other friends	39	31*	Physical health worse due to change	24	18
Other media/information sources	36	31*	Mental health worse due to change	23	15

- reference group
- statistically significant difference from the reference group at p < 0.05
- Not all types of changes are shown. For further details contact the author.
- Respondents could report both a gain and a loss in social contacts due to the change of greatest impact.
- Respondents could report more than one type of help to deal with the change of greatest impact.
- 4. Only the most commonly identified resources are shown.
- Respondents could report more than one type of help received to deal with the change of greatest impact.
- Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.
- Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training. Note: This table includes respondents aged 20 and over who experienced at least one major change in the last 12 months.

Source: Statistics Canada, General Social Survey, 2008.

Table A.2 Resources accessed when the major change is death of a loved one

	Percentage		Percentage
Type of resource used ¹		Public institutions (for example, libraries or universities)	3 E
Family	89	Most helpful resource in dealing with change ²	
Close friends	85	Family	64
Co-workers	59	Close friends	15
Other friends	61	Professionals (including doctors)	8
Neighbours	44	Religious organization	5 ^E
Business people (including employer)	44	Type of help received ³	
Professionals (including doctors)	38	Emotional	95
Religious organization	27	Instrumental ⁴	50
Other media/information services	21	Informational ⁵	34
Internet	18	Financial situation worse due to change	13
Social service or health organization	15	Employment situation worse due to change	6 ^E
Other community organization	8	Physical health worse due to change	17
Government resources (all levels of government)	8	Mental health worse due to change	27
Law or justice organization	8	· ·	

- 1. Respondents could report more than one type of help to deal with the change of greatest impact.
- 2. Only the most commonly identified resources are shown.
- 3. Respondents could report more than one type of help received to deal with the change of greatest impact.
- 4. Instrumental help includes using at least one of the following types: professional services or expertise; financial; help with household work or childcare; transportation; material goods; personal care or health needs.
- 5. Informational help includes using at least one of the following types: information or informal advice; referrals, networking or making new contacts; teaching coaching, or training.

 Note: This table includes respondents aged 20 to 64 whose change of greatest impact was death of a loved one.

Source: Statistics Canada, General Social Survey, 2008.

Looking for health information online?

Link up with Statistics Canada's Guide to Health Statistics!



The Guide to Health Statistics is a series of **online links** that lead you to health information published by Statistics Canada.

Let <u>www.statcan.gc.ca</u>'s *Guide to Health Statistics* be your passage to the world of health information. In the *Guide* you'll discover links to:

- ⇒ vital statistics
- ⇒ cancer statistics
- ⇒ health determinants
- ⇒ health status
- ⇒ health care issues
- ⇒ and much more...

Find the information you need now.

Link up to a great number of online products, documents and surveys like the National Population Health Survey. The *Guide to Health Statistics* allows you to search and locate exactly what you're looking for.

Save time. A few clicks and you'll be connected to health information from www.statcan.gc.ca, your source for health facts and analysis.

Access anywhere, anytime. You get current detailed information quickly and efficiently thanks to continuous updates, regardless of location and time constraints.

Put the data to work.

Copy text from online right into your documents and databases.

Expertise you can

trust! You can count on relevant, dependable information with a unique focus on Canada-wide indicators from Statistics Canada. So, when you're on the lookout for firstrate health facts and analysis, allow the Guide to Health Statistics to be your bridge to health information.

It's easy!

Visit our site at www.statcan.gc.ca.









Here are some of the handy links you'll find in the Guide to Health Statistics

Links to insightful analysis and data on:

⇒ Cancer

Health Surveys

- ⇒ Canadian Community Health Survey (CCHS)
- ⇒ National Population Health Survey (NPHS)
- ⇒ Smoking and Tobacco Use Surveys
- ⇒ Health Care Survey

Sample links to related sites:

- ⇒ Canadian Cancer Statistics
- ⇒ Canadian Institute for Health Information (CIHI)
- ⇒ Health Canada
- ⇒ Canadian Health Network

Health information? We've got connections!

Online activities of Canadian boomers and seniors

by Ben Veenhof and Peter Timusk

Introduction

Canadians' use of the Internet has changed the way they work, shop, gather information, communicate with friends and family, and manage their time. And yet, for all of the Internet's pervasiveness, studies of the digital divide remind us that there remain significant differences in access to and use of the Internet along socioeconomic and demographic lines, with age in particular identified as an important factor.¹

Understanding Internet use from an age-cohort perspective may provide additional insights into differences in Internet use.² Indeed, it is likely that people who currently use the Internet will continue to do so, and that differences in utilization rates by age should continue to decline. This narrowing divide can be attributed to both the movement of existing users through age cohorts, as well as new use among today's seniors.³

This article examines how seniors of today aged 65 and over use the Internet, compared with baby boomers aged 45 to 64, who are the seniors of tomorrow. It describes differences in the types of online activities, as well as in the intensity of Internet use (see "What you should know about this study" for concepts, definitions and details).

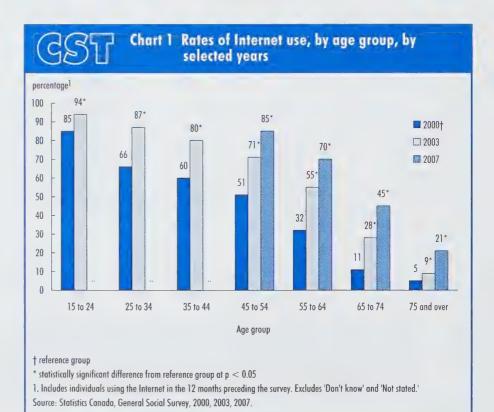
Seniors use the Internet the least, but are the fastest growing group of users

In 2007, the vast majority of boomers used the Internet, but significantly fewer seniors went online (Chart 1).

Since 2000, however, growth rates of Internet use have been highest among seniors, as they recorded use rates in 2007 that were nearly four times higher than in 2000.⁴ Conversely, rates for people aged 15 to 24 had already reached a point of near-saturation by 2003 (94%) and consequently left little room for high sustained growth rates.⁵

Although each age group experienced significant growth in Internet use rates, in 2007 the gaps in use rates remained significant.⁶

Since individual characteristics such as labour force status and education may explain part of the observed differences in Internet use rates by age group, ⁷ a logistic regression model (results not shown) was used to identify the relationships between Internet use and several sociodemographic factors. Results of the analysis show that age remains a significant and substantive predictor of Internet use, even after controlling for factors such as educational attainment and household income. ⁸



GST What you should know about this study

This study draws from two main sources, the 2007 Canadian Internet Use Survey (CIUS), and the 2007 General Social Survey (GSS), to compare the Internet use of baby boomers aged 45 to 64 in 2007 with seniors aged 65 and older.

The 2007 CIUS sample consists of over 26,000 Canadians 16 years of age or older. The sample size for individuals aged 45 to 64 was about 9,700, and over 5,500 for individuals 65 years and older. The 2007 GSS sampled more than 23,000 individuals, including about 15,000 individuals aged 45 to 64, and 8,300 individuals 65 years and older. Both surveys included residents of the 10 provinces, excluding those residing in institutions at the time.

This study uses the CIUS to analyze the online activities of Canadian Internet users, including the use of the Internet for health information, government information, and electronic commerce, as well as time spent online. The CIUS covers use of the Internet for personal, non-business reasons from any location. Some questions, such as certain online activities, were only asked of persons who used the Internet from home (see definition of "home Internet user" below).

While Internet use was not the primary focus of the 2007 GSS, it includes several aspects of the Internet use of Canadians 45 years and older that are not covered by the 2007 CIUS. The GSS asked individuals whether they had used the Internet in the last month and in the last 12 months, but did not distinguish personal use from business use. GSS data on "use of the Internet in the last 12 months" were analyzed to find trends in Internet use comparing data from previous GSS cycles. These included GSS Cycle 14 (2000), and GSS Cycle 17 (2003) (see Chart 1). Elsewhere in this study, rates of Internet use come from the CIUS. Information from these two sources are not directly comparable, but are used to complement each other.

Both surveys employ a complex sample design, and bootstrap weights were used to produce estimates and conduct statistical tests using SAS Bootvar software.

Definitions

Baby boomers, boomers, middle-aged, and seniors of tomorrow: refers to people who were aged 45 to 64 in 2007.

Seniors: refers to those who were aged 65 and over in 2007.

Home Internet user: in the 2007 CIUS, refers to a person who used the Internet from home in the 12 months preceding the survey.

Instant messaging (IM) is a common form of computermediated communication where two or more persons exchange text to simulate a conversation. Examples of instant messaging software include Windows Live Messenger and ICQ.

Contributing content online: The 2007 CIUS also asked users whether they had contributed content or participated in discussion groups online. Examples of such activities include blogging (contributing to a web log or online journal), using Internet message boards or posting photos.

Measuring the intensity of Internet use

Intensity of Internet use can be defined in many ways. For the purposes of this article, an intensive user is a person who meets at least one of two criteria: a user that exceeds the average number of online activities ("breadth of use") or is online for five hours or more from home per week. This definition was selected since some users may only perform a few activities (for example, email or instant messaging), but may do so intensively, spending hours at a time on these activities. On the other hand, a user may be online for less than five hours per week but still conduct an above-average number of activities (12 or more); considered as intensive use for the purposes of this study.

The 2007 CIUS collected information on 26 online activities. The questions for 24 activities were only asked of those who used the Internet from home, while two e-commerce related activities were asked of those who used the Internet from any location. For this analysis, only home Internet users were included.

Note

1. The following are 26 Internet activities for which the 2007 CIUS collected information: email; instant messaging; searching for government information; communicating with government; searching for medical or health information; education, training or school work; travel information or making travel arrangements; searching for employment; electronic banking; researching investments; playing games; obtaining or saving music; obtaining or saving software; viewing news or sports; obtaining weather reports or road conditions; listening to Internet radio; downloading or watching television programs; downloading or watching movies; researching community events; researching other specific matters; general browsing for fun or leisure (surfing); contributing content or participating in discussion groups (blogging, message boards, posting images); making online telephone calls; selling goods or services (through auction sites); ordering goods or services; window shopping for goods or services.

Online activities reveal different role of the Internet in seniors' lives

The gap between boomers and seniors is not just in Internet use rates. Seniors also performed a smaller variety of online activities than boomers. Choices of activities reveal different preferences, as well as the different functional role the Internet plays in their personal lives.

Email was the most common use of the Internet by seniors, with 9 in 10 Internet users taking advantage of it. Similar proportions of boomers also used email (Table 1).

For Canadian seniors with large and dispersed extended families, email may represent an efficient means of keeping in touch. Previous research has found that email users aged 65 and older were more likely to use email to communicate with relatives than all other users. Many seniors feel that it has improved their family connections, and they communicate more frequently with relatives when email is available. Many seniors feel that it has improved their family connections, and they communicate more frequently with relatives when email is available. Many seniors

Other forms of personal online communication were less popular among seniors. While 32% of boomers with Internet at home participated in instant messaging in 2007, this activity was less popular among seniors, at 26%.

Many Internet users also contributed content online by blogging, participating in discussion forums and uploading photos online. These activities were significantly less common among both boomer and senior users, who had participation rates below 10%.

Seniors more likely than boomers to play games

The Internet is a particularly popular source of leisure for online seniors and even more so for boomers. Over one-half of seniors who were home Internet users said they did general Internet browsing for fun or leisure in 2007, compared to more than two-thirds of boomers who used the Internet from home.

GST

Table 1 Internet activities performed at home in the last 12 months by Internet users, by age group, 2007

Age group

tivity	45 to 64†	65 and older		
	Home Internet users ¹ percentage			
Communication				
Email	88	90		
Using an instant messenger	32	26*		
Communicating with all levels of government	28	20*		
Contributing content (blogging, discussion groups, photos)	9	4.		
Making telephone calls over the Internet	7	5 ^E *		
Leisure				
General browsing for fun or leisure (surfing)	68	54*		
Obtaining or saving music	23	15*		
Playing games	27	36*		
Listening to the radio over the Internet	22	13*		
Downloading or watching television or movies	10	6 ^{[*}		
News and events				
Obtaining weather reports or road conditions	67	56*		
Viewing the news or sports	58	52*		
Researching community events	42	27*		
Educational use				
Education, training or school work	36	15*		
Financial information				
Electronic banking (including bill payment)	58	40*		
Researching investments	29	22*		
Other information				
Travel information or making travel arrangements	68	59*		
Searching for medical or health-related information	60	52*		
Searching for government information	53	35*		

[†] reference group

Playing games on the Internet was the second-most popular leisure activity among seniors who used the Internet from home in 2007. In fact, seniors were more likely than boomers to do so (36% versus 27%), most likely because they have more leisure time;11 the gap in participation rates was smaller when comparing only boomers and seniors who were in the labour force. Downloading music was the third most common online leisure activity mentioned by both age groups, but was significantly less popular among seniors (15%) than among boomers (23%).

Seniors stay connected to news and events...

Although the 2007 data show that online seniors were less likely than boomers to use the Internet as a research tool in general, more than one-half of seniors used the Internet to find information on travel, health, news and sports, or the weather and driving conditions. The biggest difference was in researching community events online, which attracted only 27% of senior home users but 42% of boomers.

 $^{^{\}star}$ statistically significant difference from reference group at p < 0.05

^{1.} Includes individuals who used the Internet from home for personal use in the 12 months preceding the survey. Source: Statistics Canada, Canadian Internet Use Survey, 2007.

...but are less involved in community groups online

In 2007, almost half of seniors (48%) belonged to a community group, organization, network or association in their community in the 12 months prior to the survey. This was the case for fewer baby boomers (40%) (data not shown).

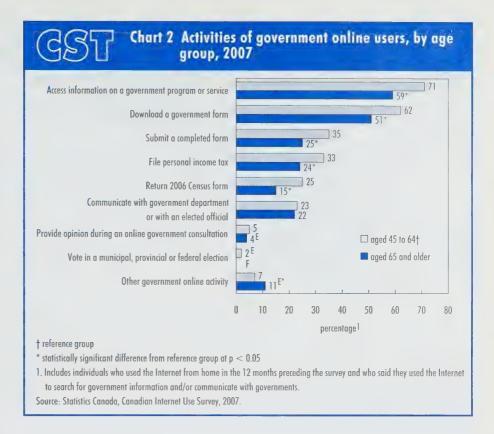
Community engagement is considered an important aspect of healthy aging¹² and the Internet represents one avenue for accessing content and services that may enhance users' social participation.¹³ While seniors were more likely to be involved in these groups, fewer did so using the Internet. Among group members, a smaller proportion of seniors (10%) were involved in their group through the Internet than were boomers (22%) (data not shown).¹⁴

Seniors use government online information differently from other users

Seniors were less likely than other online Canadians to use the Internet from home to search for government information and to communicate with governments in 2007.15 Boomers and seniors accessing government information on the Internet also had different preferences for the types of information and services they used (Chart 2). While the proportion of these users who communicated with government departments or officials online was no different by age group, a significantly higher proportion of boomers accessed information on specific programs or services, and downloaded and submitted forms online. Boomers were also more likely to file census forms and tax returns online than seniors.

The Internet is a common source of retirement planning information for boomers

As individuals move closer to their retirement years, they may become increasingly interested in information on government retirement programs such as the Canada and Quebec Pension Plans (CPP/QPP), and Old Age Security (OAS).¹⁶



While governments move to providing more information online, there are a myriad of communications methods available that the government can use to disseminate information. Amongst the possible ways are: traditional mail, Internet, newspapers, radio, television, government service centres or telephone.

When asked about how they would want to receive government retirement information, more than 7 in 10 boomers and seniors who had not yet retired stated, they would like to get information by regular mail (Chart 3).

For the Internet, there was a significant difference between the two groups: 6 in 10 non-retired boomers stated they would like retirement information via the Internet compared to few non-retired seniors (57% versus 15%).

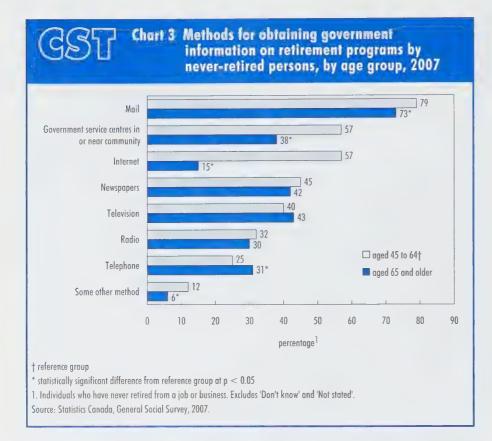
This difference suggests that the use of the Internet as an information source for government retirement programs may increase in the future as boomers enter their senior years.

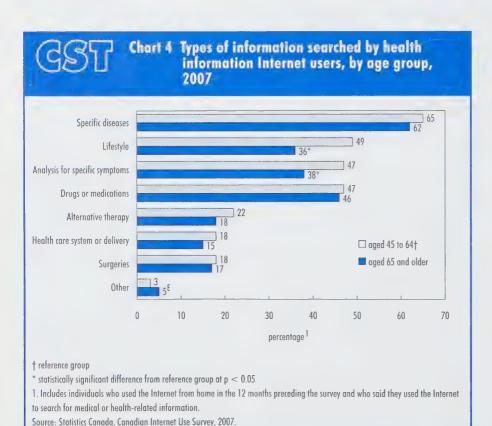
However, while the Internet has grown in popularity as a service delivery channel, evidence suggests that it complements, rather than replaces, traditional channels of citizen communication with government.¹⁷

Seniors active health information users, but look for different types of information

More than half of seniors who use the Internet searched for health information online, though proportionally fewer than baby boomers (52% versus 60%) (Table I). An earlier study found that health information users tended to possess more online experience than Internet users who did not search for health information. ¹⁸ Since seniors generally have less online experience than boomers, ¹⁹ this may partly explain the gap in use rates.

For both boomers and seniors who searched for health information online — information on specific diseases was the most common type of information sought (Chart 4).





Additionally, similar proportions of seniors and boomers who accessed health information online searched for information on drugs and medications, alternative therapy, the health care system and delivery, and information on surgeries. Boomers were more likely than seniors however to access health information related to lifestyle such as diet, nutrition, exercise and health promotion (49% vs. 36%), or to find information on the analysis of specific symptoms (47% vs. 38%).

Of those who searched for health information online and visited or communicated with a health care professional in 2007, 29% of seniors and 40% of boomers discussed the information they obtained online with their practitioner (data not shown).

Seniors not yet buying into e-commerce

Electronic commerce (e-commerce) continues to grow in Canada, although much of the value of online orders is concentrated among a relatively small group of users.²⁰ Internet shopping includes not only purchasing online, but also browsing products and services online to gather information ("window-shopping") for making future purchasing decisions, which may result in either an online or in-store purchase. About four in ten (41%) boomer Internet users placed orders online in 2007, and 56% said they window-shopped online for goods and services. These activities were much less common among seniors (Table 2).

The most popular online purchases were travel arrangements and reading materials such as books, magazines and online newspapers. Similar proportions of seniors and boomers purchased reading materials (almost 40%); however seniors were significantly less likely to make travel arrangements online (38% versus 53% of boomers) (data not shown).

Boomers who placed orders online averaged about 8 orders during the year, significantly more than seniors. Among those who window-shopped

Table 2 Electronic commerce, by age group, 2007

	Age group		
ivity	45 to 64†	65 and older	
	percentage		
Among Internet users from any location ¹			
Electronic window shopping ²	56	33*	
Electronic orders ³	41	26*	
Among individuals who window shopped online			
Electronic window shopping, resulting in an in-store purchase	60	43*	
	number		
Among individuals who placed orders online			
Average number of orders placed online	7.9	4.6*	

- t reference group
- * statistically significant difference from reference group at p < 0.05
- Includes individuals who used the Internet from any location (home, work, school, library or other locations) for personal use in the 12 months preceding the survey.
- 2. Window shopping includes browsing for goods or services online, without necessarily ordering items online.
- Includes orders for goods or services online, whether or not payment was made online.

Note: Electronic commerce includes goods or services for personal or household consumption (non-business), ordered from any location (home, work, school, library, or other locations) in the past 12 months.

Source: Statistics Canada, Canadian Internet Use Survey, 2007.

on the Internet, more boomers (60%) than seniors (43%) said that their online window shopping later resulted in an in-store purchase from a retailer.

E-commerce may be related to levels of Internet experience as well as security concerns. The most active online consumers are less likely to report high levels of concern about online credit card use.21 Seniors tend to have less online experience than users under 65, and seniors and boomers alike also tend to express high levels of concern over Internet security. For example, similar proportions of boomers and seniors who owned credit cards (approximately 60%) said they would be very concerned about using their credit card online in 2007, significantly more than credit card owners aged 16 to 44 (46%) (data not shown).

In addition to the factors already mentioned, lower levels of e-commerce among seniors may also reflect wider consumption patterns. Since seniors typically purchase less than boomers in general,²² the finding that seniors also spend less online is not unexpected. As an example, in 2007 senior households reported average total expenditures of \$42,000, or about half the total spending by boomer households.²³

Which seniors are the most Internet-savvy?

Similar proportions of senior and boomer home Internet users went online for personal use for five hours or more in a typical week (approximately 40%). However, more boomers are employed and may have less discretionary time than seniors. When comparing only those online boomers and seniors who are in the labour force, similar proportions of each spent five hours or more online per week (38%). When considering those out of the labour force, the results for boomers and seniors were not significantly different (data not shown).

Yet although seniors and boomers did not differ in terms of the time devoted to Internet use from home, the range of online activities undertaken by each group differed. Of a possible total of 26 online activities, seniors averaged 7.6 activities while boomers averaged 10.1 activities.

Nevertheless, approximately one-half of online senior and boomer home users qualified as "intensive users," at 47% and 53% respectively (see "What you should know about this study"). Similar proportions of boomers who were in the labour force and out of the labour force were intensive users (just over half). As well, among seniors, almost half of those in and half of those out of the labour force were intensive users.

The only significant difference found was between those not in the labour force. Indeed, 52% of boomers not in the labour force were intensive Internet users compared to 46% of non-working seniors (data not shown). While those not working may have more time to use the Internet for personal use, the intensity of use may be related to their previous workplace Internet experience.²⁴

Senior intensive users came from households with similar median income levels and had similar levels of educational attainment to other online seniors (nearly 30% in each group had a university degree). There were, however, gender differences between intensive and non-intensive senior Internet users. Just over onehalf of senior men who used the Internet from home were intensive users, compared with fewer senior women online (53% versus 39%). Among boomers who used the Internet from home, the gender gap was smaller, at 57% of men compared with 49% of women (data not shown).

Summary

In 2007, seniors were significantly less likely to be online than boomers, but the relative gap in Internet use rates between these groups has been closing from 2000 to 2007.

The increase in Internet use rates among older Canadians will likely persist as today's seniors continue to

GST Few offline seniors plan to start using the Internet in the near future

Fewer seniors use the Internet than boomers. Of those seniors who were offline in 2007, less than 5% said that they planned to start using the Internet in the next year. This is in contrast to the 11% of offline boomers who plan to go online.

The main reasons expressed for not using the Internet among both seniors and boomers were: a lack of interest (approximately 1 in 3 offline seniors and boomers); and a lack of need (1 in 5 in each group). These proportions may suggest that most non-users are satisfied with their existing outlets for information, entertainment and communication.

Seniors were more likely to mention their age as a reason for not planning to take up the Internet (31% versus 5% of boomers).

Some seniors and boomers relate their skills and inexperience with the Internet or computers as reasons for not going online. Among non-users, fewer seniors than boomers mentioned that a lack of skills or training was one

reason they did not go online (16% versus 20%). As well, some offline seniors and boomers said that they found the Internet or computers too difficult to use (7% versus 10%).

One issue that could not be studied from available data sources relates to awareness and familiarity with the Internet and its associated technologies and applications. As with many technologies, individuals' plans to start using the Internet may be influenced not only by their existing skills, but also by their past experience, perceived skills and comfort with technology. Most seniors are out of the workforce, and some do not have as large a social network as younger Canadians, where they might have the opportunity to explore or discuss different uses of the Internet with colleagues or friends.¹

Note

1. Salkowitz, R. (2008). Generation Blend: Managing Across the Technology Age Gap. Hoboken, N.J.: John Wiley & Sons.

adopt the Internet as an information tool. Additionally, because almost 80% of the baby boom generation are current Internet users, as these individuals age their continued use of the Internet is likely. These shifts, coupled with evidence that few online individuals later decide to cease using it, suggest increasing rates of Internet use among Canadian seniors.

While Internet use rates among Canadian seniors are likely to continue to increase, less is known about how specific patterns of online behaviour will change as boomers age. In every generation, the needs and preferences of individuals are likely to change as they age.²⁵ This study did not examine changes in online behaviour over time, but did find that online baby boomers and seniors differed significantly in the types of activities they perform online.

Whether seniors of tomorrow will spend more time online—on average—than do today's seniors, is not immediately clear. Overall, the fact that today's baby boomers

generally engage in more online activities suggests that as the age cohorts move through time, Canadian seniors will have higher levels of Internet experience and increasingly diverse usage patterns. However, the extent to which these changes occur will vary with users' changing needs



Ben Veenhof and **Peter Timusk** are analysts with Business Special Surveys and Technology Statistics Division at Statistics Canada.

- Silver, C. (2001a). Internet use among older Canadians. Connectedness Series, 4. Statistics Canada Catalogue no. 56F0004MIE.
 - Silver, C. (2001b). Older surfers. Canadian Social Trends, 63. Statistics Canada Catalogue no. 11-008-XIE.
 - Sciadas, G. (2002). Unveiling the digital divide. Connectedness Series, 7. Statistics Canada Catalogue no. 56F0004MIE.
- Gilleard, C., and Higgs, P. (2008). Internet use and the digital divide in the English longitudinal study of ageing. European Journal of Ageing, 5(3), 233-239.

- Noce, A. A., and McKeown, L. (2008). A new benchmark for Internet use: A logistic modeling of factors influencing Internet use in Canada, 2005. Government Information Quarterly, 25, 462-476.
- Several observations provide supporting evidence for the cohort effect. Up until now, relatively few people who start using the Internet stop using it. See: McKeown, L., and Underhill, C. (2007). Dropping the Internet: Who and why? Innovation Analysis Bulletin, 9(2). Statistics Canada Catalogue no. 88-003-XWE; and, Crompton, S., Ellison, J., and Stevenson, K. (2002). Better things to do or dealt out of the game? Internet dropouts and infrequent users. Canadian Social Trends, 65. Statistics Canada Catalogue no. 11-008. For example, 2007 Canadian Internet Use Survey (CIUS) data show that among Canadians 16 years and older, only 3% had used the Internet in the past but did not use it in the 12 months preceding the survey. At the same time, very few non-users expressed an interest in starting to use the Internet: only 11% of boomer non-users indicated that they planned to start using the Internet in the next year and 4% of seniors who were not yet online stated likewise. While non-users' plans to start using the Internet provide some indication of how use rates might change over time, panel data would be required in order to differentiate between

age and cohort effects (Peacock and Künemund, 2007).

Peacock, S. E., and Künemund, H. (2007). Senior citizens and Internet technology: Reasons and correlates of access versus non-access in a European comparative perspective. European Journal of Ageing, 4, 191-200.

- 4. This analysis considers relative growth rates. While the relative growth is highest among seniors, absolute differences in use rates persist and in some cases have widened. For example, there was a 46 percentage point difference in use rates between persons aged 45 to 54 and those 75 and older in 2000 (a 51% use rate minus a 5% use rate). By 2007, the difference had increased to 64 percentage points (an 85% use rate minus a 21% rate). However, in relative terms, the use rate among persons 45 to 54 was about 10 times that of persons 75 and older in 2000, but in 2007 was only about 4 times that of persons 75 and older. In other words, for some age groups the absolute difference in use rates increased over the time period, while the relative difference decreased.
- 5. Statistics Canada, General Social Survey, 2003.
- 6. In addition to the General Social Survey (GSS), data on individual Internet use rates by age group are also available from another source—the 2005 and 2007 Canadian Internet Use Survey (CIUS). The Internet use questions on the CIUS differ from the General Social Survey (GSS) in that they cover only personal, nonbusiness use of the Internet, whereas the GSS data refer to Internet use in general. For this reason, the CIUS and GSS data are not directly comparable. However, the 2005-2007 CIUS data on personal Internet use reveal similar patterns: by 2007, the gap in use rates by age groups remained significant; and while the oldest age groups had the lowest use rates, they experienced the highest relative growth in use rates over the two-year period 2005 to 2007.
- 7. Peacock and Künemund. (2007).

Dobransky, K., and E. Hargittai. (2006). The disability divide in Internet access and use. *Information, Communication and Society*, 9(3), 313-334.

Korupp, S. E., Künemund, H., and Schupp, J. (2006). Digitale Spaltung in Deutschland: Geringere Bildung-seltener am PC. DIW Wochenbericht, 19(6), 289-294.

- 8. The logistic regression model was run using the 2007 CIUS target population of individuals aged 16 and older. The full list of independent variables used in the model includes the following: age, educational attainment, household income quintile, labour force status (in or out of the labour force), urban-rural location, and sex.
- Veenhof, B., Wellman, B., Quell, C., and Hogan, B. (2008). How Canadians' use of the Internet affects social life and civic participation. Connectedness Series, 16. Statistics Canada Catalogue no. 56F0004MIE.
- Howard, P., Rainie, L., and Jones, S. (2001). Days and nights on the Internet: The impact of diffusing technology. American Behavioral Scientist, 45, 450-472.

Thayer, S., and Ray, S. (2006). Online communication preferences across age, gender, and duration of Internet use. Cyberpsychology and Behavior, 9(4), 432-440.

- Hurst, M. (2009). Who participates in active leisure? Canadian Social Trends, 87. Statistics Canada Catalogue no. 11-008-XIE.
- 12. Kahn, R., and Rowe, J. (1998). Successful Aging. New York: Pantheon Books.
- 13. Peacock and Künemund. (2007).

Czaja, S. J., and Lee, C. C. (2007). The potential influence of the Internet on the transition to older adulthood. In H.-W. Wahl, C. Tesch-Römer, and A. Hoff (Eds.), New dynamics in Old Age: Individual, Environmental, and Societal Perspectives (pp. 239-251). Amityville, NY: Baywood Publishing.

- 14. Differences in this paragraph are statistically significant at p < 0.01.
- 15. A previous study using 2005 CIUS data found that less than one-half of online seniors used government online information, and more than one-half of users in other age groups did so. See: Underhill, C., and Ladds, C. (2007). Connecting with Canadians: Assessing the use of Government On-Line. Connectedness Series, 15. Statistics Canada Catalogue no. 56F0004MIE. A similar pattern was also observed with the 2007 GSS data (not shown), which confirmed that online seniors were less likely than middle-aged adults to have used the Internet to access information on government programs and services, and also did so with less frequency.

- 16. For a study examining retirement planning by individuals using GSS 2007 data, see: Schellenberg, G., and Ostrovsky, Y. (2008). 2007 General Social Survey report: The retirement puzzle: Sorting the pieces. Canadian Social Trends, 86. Statistics Canada Catalogue no. 11-008-XIE.
- Spears, G., Seydegart, K., Schmidt, F., and Zulinov, P. (2008). Citizens First 5. ERIN Research. Toronto: Institute for Citizen-Centred Service. Retrieved February 11, 2009 from http://www.iccs-isac.org/en/cf/index.htm
- Underhill, C., and McKeown, L. (2008).
 Getting a second opinion: Health information and the Internet. Health Reports, 19(1). Statistics Canada Catalogue no. 82-003-XWE.
- 19. Fewer seniors who use the Internet from home have been online for five years or longer compared with boomers (60% versus 69%).
- 20. McKeown, L., and Underhill, C. (2007). Canada's top online spenders: Who are they and what are they buying? *Innovation Analysis Bulletin*, 9(1). Statistics Canada Catalogue no. 88-003-XWE.

Statistics Canada. (2008b, November 17). E-commerce: Shopping on the Internet. *The Daily*. Statistics Canada Catalogue no. 11-001-XIE.

- 21. Statistics Canada. (2008b).
- 22. Chawla, R. (2005). Shifts in spending patterns of older Canadians. *Perspectives on Labour and Income*, 6(12). Statistics Canada Catalogue no. 75-001-XIE.
- 23. Senior households have a reference person aged 65 and over. Boomer households have a reference person 45 to 64 years of age. Statistics Canada. (2007). 2007 Survey of Household Spending (custom tabulation)
- 24. McKeown, L., Veenhof, B., and Corman, J. (2008). Profiling Internet use among workers in the information and communications technologies sector. Innovation Analysis Bulletin, 10(1). Statistics Canada Catalogue no. 88-003-XWE.
- 25. Peacock and Künemund. (2007).

Selwyn, N., Gorard, S., Furlong, J., and Madden, L. (2003). Older adults' use of information technology in everyday life. Aging Society, 23, 561-582.

Forty-year-old mothers of pre-school children: A profile

by Mireille Vézina and Martin Turcotte

wenty years ago, very few women aged 35 and over gave birth to their first child. However, it happens more frequently these days. In 2006, 11% of all first births were to women aged 35 and over, almost triple the proportion observed in 1987. Moreover, the average age of women at their first child's birth rose from just under 24 in the 1960s to 28 in 2005.²

The increase in the average age at first birth means that more women are having children in their thirties and early forties. According to demographic estimates, nearly half of all births in 2006 were to women aged 30 and over, double the 1981 proportion (23.6%).

In addition, the total fertility rate for women in their forties has been rising. There were 7.4 births per 1,000 women aged 40 to 44 in 2006, compared with 3.2 per 1,000 in 1981

The fact that increasing numbers of women in their late thirties or early forties are mothers of young children is a well-documented demographic trend. The increase in delayed childbearing is largely related to changes in society. Women are staying in school longer, participating in the labour force in greater numbers, and are more likely to have jobs that

require advanced skills. As a result, they enter the labour force later and delay having their first child.

The various social, economic and demographic consequences of delayed childbearing have also been the subject of many studies and debates. In particular, later pregnancies are associated with certain risks to the health of the mother or the child. Delayed childbearing also has an impact on the natural increase of the population (see the box entitled "The consequences of delayed childbearing for women, children and society").

Nevertheless, apart from a few generalities, little is known about other recent socio-economic characteristics of women in their forties who have young children. Who are they? Are they more likely to be immigrants? Are they more likely to live in metropolitan communities than in lower-density regions? What are their occupations? Do they have a higher income than other women their age? In addition to having young children, are they caring for elderly persons? The aim of this article, which is based on 2006 Census data, is to answer these questions (for more details concerning the methodology, see "What you should know about this study").

Education — an important factor: Women who have a university degree are more likely to be mothers in their forties

The number of older mothers with a pre-school child or children has more than doubled in the last 20 years. The 2006 Census enumerated 1.3 million women aged 40 to 44 in Canada, and 117,100 of them, or 8.9%, were mothers of at least one pre-school child (aged 0 to 4). That was double the proportion observed in 1986 (4.3%) (see the box entitled "The evolution of fertility among women aged 35 and older").

According to studies by demographers and sociologists, the increase in the proportion of older mothers with young children is primarily due to higher educational attainment among women and greater labour market participation by women.³ University graduates complete their studies later, are more likely to participate in the labour market and have different expectations regarding their family roles and life in general.⁴ For example, according to economist Gary Becker, the more highly educated a woman is, the greater her labour market earnings and the higher the opportunity cost or financial losses associated with having a child.5

(95) What you should know about this study

Data source

The analyses in this article were based on data from the 1986 and 2006 Censuses of Canada. Persons living in institutions or collective dwellings are excluded from this study.

Population studied

The population studied consists of women aged 40 to 44 (both mothers and non-mothers). The expressions "pre-school children," "young children" and "small children" refer to children aged 0 to 4 living at home. Women aged 45 to 49 were not studied because the small number of women in that age group with young children form too small a sample size.

Data limitations

The Census collects information about people who "usually" live together in the same household and about their relationship to one another (father, mother, son, daughter, grandfather and so on). That information makes it possible to identify women who have young children. According to the instructions provided to respondents completing their census questionnaire, "children in joint custody who live here most of the time" should be included as household members. "Children who spend equal time with each parent should be included in the home of the parent where they are staying on May 16, 2006."

Since the Census is based on a household's usual residents, it is impossible to associate absolutely every child with his or her mother. For example, a 41-year-old woman who has one child, age 12, and is separated will be deemed a "non-mother" if the child does not usually live with her. For the purposes of this study, the main concern is to determine the extent to which the Census underestimates the proportion of women aged 40 to 44 who have a pre-school child.

The answer to this question comes from the 2006 General Social Survey (GSS), which provides information about all the children a woman has had in her lifetime. According to the survey, the proportion of women aged 40 to 44 who have a pre-school child is virtually unaffected by the fact that we have no information about children living in other households (in joint custody, for example). The GSS tells us that 9.75% of women aged 40 to 44 had at least one pre-school child, no matter who the child or children were living with. If we include only those women who usually live with their child (i.e., if we use the census method with GSS data), the result is practically the same: 9.72% had a pre-school child.

The difference is slightly larger for women who have older children (since those children are more likely to have left the parental home). According to the 2006 GSS data, 8.1% of women aged 40 to 44 had children but were not living with them. As a result, the proportion of women aged 40 to 44 who have a child aged 5 or over is slightly underestimated by the Census. This could present a problem if the socioeconomic characteristics of women who were not living with their children were different from the characteristics of women who were living with their children. However, GSS data show no appreciable difference in that regard between women who have children aged 5 or over based on whether they live with them or not.

Mothers who have only pre-school children and mothers who have both pre-school and school-age children

Being the first-time mother of a pre-school child at age 40 is not the same as being the mother of a young child and of older children. In the former case, family life is just beginning, marking a new stage in one's life cycle, parenthood. That's not the case when one already has children; it's more of a

To reflect this reality, we distinguish, in some parts of the article, between women aged 40 to 44 who only have young children (age 0 to 4) and women who have both young children and school-age children (age 5 and older). All women aged 40 to 44 who only have young children must necessarily have given birth to their first child after age 35. In 2006, they made up about a third (31.9%) of the 117,000 women aged 40 to 44 who had small children (the remainder being women who had both young children and older children). In instances where there was no substantial difference between the two groups, they were combined to simplify the discussion. In some cases, the sample size was not large enough to differentiate between women who had only pre-school children and women who had both pre-school children and older children.

First births

The use of census data places some limitations on the available information about the exact number and rank of the children that women have had in their lives. However, GSS data tell us that virtually all women aged 40 to 44 who live with children between the ages of 0 and 4 (but not with older children) became mothers for the first time at age 35

GST What you should know about this study (continued)

or older. According to GSS data, less than 0.5% of women aged 40 to 44 who were living with their child aged 0 to 4 (but no older children) had other children who did not live with

them. In other words, more than 99.5% of women aged 40 to 44 who live with one or more children aged 0 to 4 only gave birth to their first child when they were 35 or older.

Data from the 2006 Census show that more highly educated women, particularly women with university degrees, were much more likely to have their children in their thirties or forties. In 2006, 13.8% of women aged 40 to 44 who had a bachelor's degree were mothers of a young child, compared with just 6.4% of women who had a high school diploma or less. The proportion was 19.8% for women who had a doctorate (Chart I).

Women's higher education levels help to explain the increased proportion of older mothers with young kids

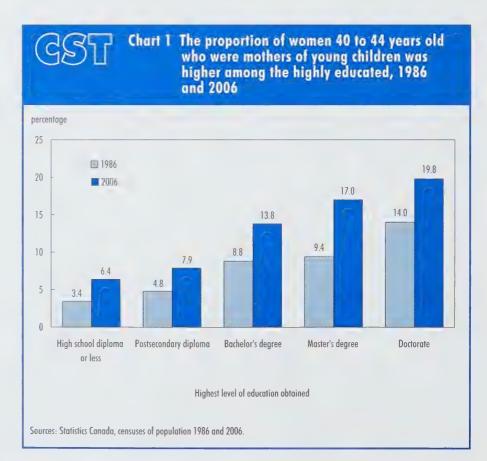
Highly-educated women make up a growing proportion of the population. In Canada, the proportion of women aged 40 to 44 who have a university degree more than doubled in 20 years, climbing from 11.0% in 1986 to 22.5% in 2006. Statistics suggest that the higher that proportion is, the more common childbearing will become for women in their thirties and forties.

A decomposition analysis shows that just over a quarter (28%) of the increase in the proportion of 40-year-old women with young children is due to the increase in women's average educational attainment (in the same period). The remainder of the increase can be attributed to differences in the behaviours of younger generations relative to their predecessors, particularly the various transitions to adulthood that are taking place at a more advanced age, regardless of educational attainment.

Women aged 40 to 44 who had a high school diploma or less were also more likely to have young children in 2006 than in

Despite the importance of education, the impact of other factors and the considerable changes in values, particularly regarding women's role in society and the labour market, should not be underestimated.⁷ The fact that young people's transitions to

adulthood are occurring later and in a less linear manner than in the past has also affected the timing of the first birth for many women. Leaving the parental home, landing a full-time job, forming a stable union and buying a home are all taking place, on average, at a more advanced age. Of course, the later young adults make these transitions, the greater the likelihood that there will be a delay in having children.



CST The evolution of fertility among women aged 35 and older

During the first half of the twentieth century, women who gave birth in their thirties was more common than today. However, the underlying situation differed substantially from today. For example, during the first quarter of the twentieth century, most Canadian families lived on the farm and large families were the norm. Indeed, in 1901 women gave birth to an average of 4.6 children falling to about 3.5 children per woman by 1921. Thus during this time, when a woman in her 30s gave birth to a child it was unlikely to be her first birth.

During the depression years, the difficult economic conditions contributed to lower marriage rates, and a higher average age at marriage. By 1937, the total fertility rate¹ had declined to 2.6 children per woman. As well, the average age at first birth was on the rise compared to the beginning of the 20th century.²

In contrast, during the period immediately following World War II, the total fertility rate increased to a post-war peak of 3.9 children per woman in 1959. Also during this period, women began their families in their twenties, and were unlikely to have their first child in their thirties or forties.³ During the 1970s and 1980s, most women continued to begin their families when they were in their twenties. However, with declining fertility, most of them stopped after two children and as a result, few women gave birth after they had entered their mid-thirties. In contrast, in the present era, mothers in their forties are much more likely to be raising their first child.

- The total fertility rate refers to the number of children that a woman would have over the course of her reproductive life (age 15 to 49) if she experienced the age-specific fertility rates observed in a given calendar year.
- 2. Milan, Anne. (2000). One hundred years of families. Canadian Social Trends, 56. Statistics Canada, Catalogue no. 11-008.
- Statistics Canada. (2003). Report on the Demographic Situation in Canada. Statistics Canada, Catalogue no. 91-209-XIE. Ottawa: Minister of Industry.

Fertility rate among women 35 to 44 years old, Canada, 1926 to 2006

Fertility rate per thousand women



Sources: Statistics Canada, Health Statistics Division and Demography Division.

GST The consequences of delayed childbearing for women, children and society

The fact that women are, on average, giving birth to their first child later has a number of consequences for them and for society. With regard to the impact on women's health, later pregnancy is associated with certain risks, such as greater prevalence of low birth weight and premature delivery (or false labour), ¹ and higher incidence of gestational hypertension and pregnancy diabetes.² Although medical advances have substantially improved the survival rates of premature babies, researchers have shown that prematurity could saddle both families and society with financial costs and a significant burden in terms of the additional care required.³ Moreover, children born to older women (especially women aged 45 or older) are more likely to have chromosomal abnormalities.⁴

Aside from the health effects, the fact that women are older when they give birth for the first time may have an impact on population renewal through births. The chances of getting pregnant and giving birth decline as women age: 91% of women succeed in getting pregnant at age 30, compared with 77% at age 35 and 53% at age 40.5 The older a woman is at first birth, the fewer children she is likely to have.6

In addition, delayed childbearing may have an impact on employers and workplaces. Women who have their first child later are more likely to have jobs that require a high level of skill; they are also more likely to have risen to supervisory and management positions in their workplace. Some may be more difficult to replace when they take maternity leave, because they have more experience in their workplace.

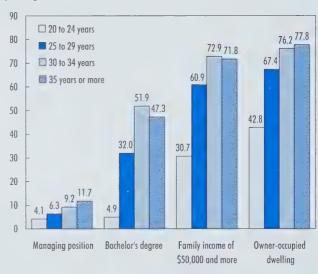
There are, however, also positive consequences related to delayed childbearing. For example, the many years spent getting an education and pursuing personal or professional goals are the reason that women have children later, in many cases. Those years of study and work are important, as they provide the means to acquire a variety of financial and other resources that may help them when they become parents.

That is the main argument of a recent study that found that women who have children after age 35 have more financial resources and more life experience and are more satisfied with their career and marital situation than women who become mothers earlier. Several of those ideas are supported by census data. In general, women who delayed childbearing were in a better socio-economic situation when their first child was born. In particular, they were better educated, more likely to live in a family whose income was in excess of \$50,000, more

likely to have a university degree and more likely to own their home (Chart below). They were also much more likely to have a management position in their workplace.

Women who have a first child at a more advanced age have a better socio-economic situation when the child is born, 2006





Socio-economic situation

Note: Only includes mothers of a child less than one year old on Census Day (and that are not already the mother of an older child), according to age group.

Source: Statistics Canada, Census of Population, 2006.

Moreover, even though the risks associated with pregnancies carried to term after age 35 clearly exist, they are relative. The difference between younger women (age 20 to 34) and older women (age 35 to 49) having a child with low birth weight or a premature baby is small. In 2006, the proportion of babies with low birth weight was 8.3% for women aged 35 to 49 and 6.7% for women aged 20 to 34.8 Similarly, in 2006-2007, 8% of births were premature for mothers between the ages of 20 and 34, while the proportion for mothers aged 35 and over was only slightly higher at 10%.9 Additionally, the effects on the health and early childhood development of children of mothers over 35 appear to be fairly limited. According to a study published by Statistics Canada, the mother's age has little impact on the physical, behavioural and cognitive development of children aged 0 to 5.10

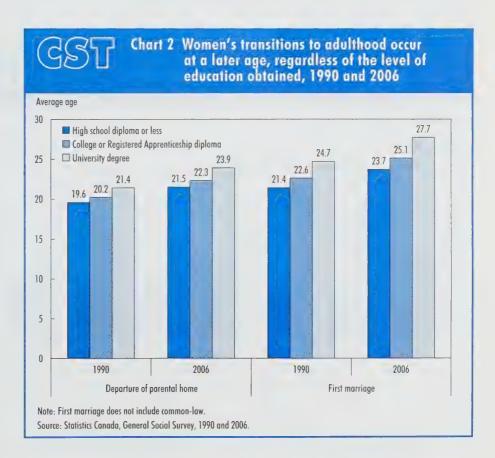
GST The consequences of delayed childbearing for women, children and society (continued)

- Canadian Institute for Health Information. (2009). Too Early, Too Small: A Profile of Small Babies Across Canada. Ottawa: Canadian Institute for Health Information.
- Joseph, K. S., Allen, A. C., Dodds, L., Turner, L. A., Scott, H., and Liston, R. (2005). The perinatal effects of delayed childbearing. Obstetrics and Gynecology, 105(6), 1410-1418.
- 3. Public Health Agency of Canada. (2005). Make Every Mother and Child Count: Report on Maternal and Child Health in Canada, H124-13/2005. Ottawa: Public Health Agency of Canada.
 - Petrou, S., Sach, T., and Davidson, L. (2001). The long-term costs of preterm birth and low birth weight: Results of a systematic review. Child: Care, Health and Development, 27(2)(March), 97–115.
 - Canadian Institute for Health Information. (2009).
- Health Canada. (2002). Congenital Anomalies in Canada: A Perinatal Health Report. Ottawa: Minister of Public Works and Government Services Canada.

- Senzilet, L. et al. (2004), Reproduction at Older Ages: The Health Implications. Health Canada, Health Policy Research Bulletin, 10, 15-20.
- Kohler, H.-P., Billari, F. C., and Ortega, J. A. (2002). The emergence of lowest-low fertility in Europe during the 1990s. Population and Development Review, 28, 641-680.
- 7 Gregory, E. (2007). Ready: Why Women Are Embracing the New Later Motherhood. Philadelphia, PA: Basic Books.
- 8 Statistique Canada. Live births, birth weight indicators, by characteristics of the mother and child, Canada, annual (percent unless otherwise noted). CANSIM Table no. 102-4511.
- 9. Canadian Institute for Health Information. (2009)
- Bushnik, T., and Garner, R. (2008). The children of older first-time mothers in Canada: Their health and development. Children and Youth Research Paper Series, 005. Statistics Canada Catalogue no. 89-599-M.

The changes in the timing of these transitions have affected all women, regardless of their level of schooling (Chart 2). As a result, less welleducated women are twice as likely to have young children at a more advanced age than they were 20 years ago: the proportion of women with a high school diploma or less who had pre-school children was 3.4% in 1986 and 6.4% in 2006 (Chart 1). The ratio between these two proportions points to an even faster increase than for women with a university degree. Some researchers have attributed this slight convergence in the fertility of better educated women and less well educated women to policies that have reduced the conflicts between pursuing a career and having children, such as the availability of child care services.9

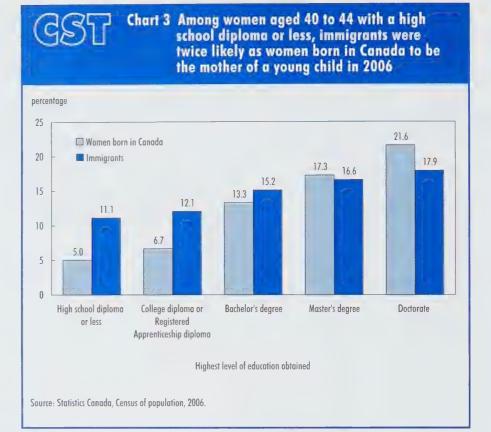
Education is nevertheless a key factor in understanding the increase in the proportion of 40-year-old women who have young children.

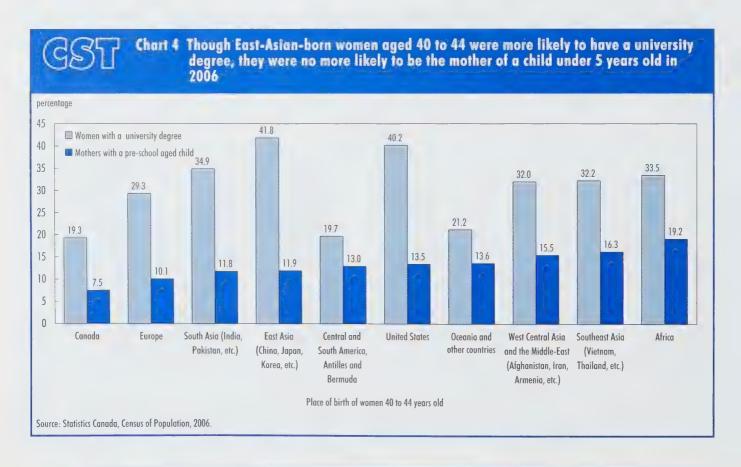


Immigrant women are more likely than Canadian-born women to be older mothers of young children

Since education is one of the most important factors in the probability that a woman in her forties will have a young child, those with the highest levels of education at this age are also more likely to be mothers of young children than other women of the same age. This is particularly true of women in that age group who were born outside of Canada. In 2006, 1 in 3 had a university degree, compared with 1 in 5 Canadian-born women. The proportion that had a pre-school child was also higher: 12.9% versus 7.5% for Canadian-born women.

However, education does not explain everything. Immigrant women with lower levels of educational attainment were considerably more likely than non-immigrants to be older mothers of young children (Chart 3). Moreover, the correlation between educational attainment and the likelihood of being a mother in her





forties was stronger for non-immigrant women than for immigrants.

Cultural factors, such as religious affiliation, 10 can enter the mix and may have an impact on the likelihood of being a 40-year-old mother with young children. The same holds true for the relationship between an immigrant woman's place of birth and her propensity to have young children at that stage of her life. For example, although women aged 40 to 44 who were born in East Asia had the highest levels of education. they were not the most likely to have young children in their forties. Conversely, while women aged 40 to 44 who were born in Central America. South America, the Caribbean and Bermuda were not noticeably more likely than Canadian-born women to have a university degree, a larger proportion of them were mothers of young children (Chart 4).

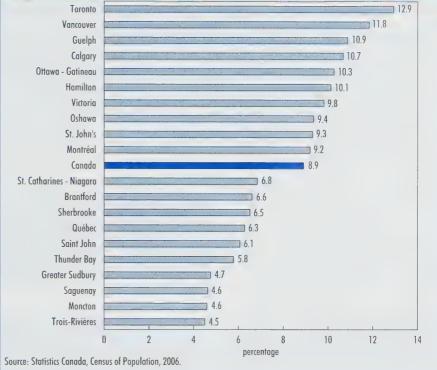
Older mothers whose oldest child is under 5 are more likely to live in urban areas

In general, urban populations are better educated and have a higher proportion of immigrants than rural populations. Consequently, women aged 40 to 44 who had only preschool children were more likely to live in urban areas (89.6% of them) than women in the same age group whose children were all age 5 or older (81.2%) (results not shown).

Metropolitan areas differ with respect to the adult population's average level of education, income and the concentration of the immigrant population. The Toronto and Vancouver census metropolitan areas (CMAs) had by far the highest proportions of immigrants and led all CMAs in the proportion of the adult population with a university degree (Chart 5). In 2006, these two cities were also the CMAs with the largest percentages of women in their early forties who had a pre-school child. The Guelph CMA, which ranks third in the proportion of women in their forties who have young children, is a university area that has a high

Chart 5 The 10 metropolitan areas with the highest and the lowest proportions of women aged 40 to 44, who were mothers of pre-schoolaged children, varied according to the size of the region in 2006

Toronto Vancouver Guelph 10.9



proportion of women with a master's degree or a doctorate (in 2006, it ranked third highest of all CMAs in this respect).

Women in their forties whose oldest child is under 5 have jobs that require a high level of skill

Given that women aged 40 to 44 who have young children are better educated on average than other women in this age group, they might be expected to work in occupations that demand a higher level of skill. Census data support this. About 29.7% of women aged 40 to 44 who had young children were in a "professional" occupation, that is, an occupation that requires a university degree (a bachelor's degree or higher) (Table 1). The corresponding proportion was 23.3% for women whose voungest child was between 5 and 11, and 13.8% for women with children aged 12 and over.

The set of "professional" occupations is very diverse, ranging from physicist to high school teacher, from optometrist to accountant. As a result, a closer look at the occupations of older mothers with young children is of interest.

Women physicians in their early forties are the most likely to have young children

Table 2 shows that in the female population aged 40 to 44, health professionals were particularly likely to have young children. In 2006, that was true for more than one in five women physicians, dentists or veterinarians (22.0%). In fact, when we look only at women specialist physicians (doctors with a medical specialty), one in four was the mother of pre-school children (the highest proportion reported for any individual occupation in Canada¹¹) (results not shown). Following next

Table 1 Distribution of mothers aged 40 to 44 years old by child's age and skill level required by their occupation, 2006

	Mothers 40 to 44 years old						
cupation by skill level	with a child aged 0 to 4 years	with youngest child aged 5 to 11 years	with child(ren) aged 12 years or more				
		percentage					
Managers	10.3	9.0	8.8				
Professionals (level A)	29.7	23.3	13.8				
Technicians (level B)	25.9	27.3	28.1				
Intermediate workers (level C)	26.3	31.4	36.7				
Less skilled workers (level D)	7.9	9.0	12.7				

were women judges, lawyers and Quebec notaries (19.5%); followed by engineers (17.5%); and university professors and assistants (17.2%). In general, the professions with high proportions of older mothers of preschool children required a high level of specialization.

The occupations in which women who have young children are best represented are not necessarily the most common occupations among women in their early forties. The bottom section of Table 2 shows the top 10 occupations among women in that age group. Several of those occupations, such as retail sales clerk, secretary, cleaner and administrative officer, require fewer years of education. Women in these occupations are less likely to have young children when they are in their forties. Nurses and pre-school and elementary school teachers, very common occupations among women aged 40 to 44 that require a postsecondary education, have proportions of older mothers with young children that are above average for the female population (10.0% and 11.5%)

GST

Table 2 Occupations with the highest proportion of older mothers of pre-school children and the most common occupations of all women aged 40 to 44, 2006

> Mothers aged 40 to 44 with child(ren) aged 0 to 4 years

	percentage
Occupations which have the highest percentage of pre-school	
aged child(ren)	
Physicians, dentists and veterinarians	22.0
Judges, lawyers (across Canada) and Quebec notaries	19.5
Civil, mechanical, electrical and chemical engineers	17.5
University professors and assistants	17.2
Life science professionals	16.9
Optometrists, chiropractors and other health diagnosing and treating professionals	16.7
Pharmacists, dietitians and nutritionists	16.3
Architects, urban planners and land surveyors	16.1
Therapy and assessment professionals	15.3
Creative and performing artists	14.8
Most common occupations among women of 40 to 44 years old	
Retail salespersons and sales clerks — retail trade	6.1
General office clerks	6.9
Registered nurses	10.0
Secretaries (except legal and medical)	5.9
Elementary school and kindergarten teachers	11.5
Accounting and related clerks	6.4
Light duty cleaners	5.4
Administrative officers	7.7
Early childhood educators and assistants	10.4
Managers — retail trade	6.0

Source: Statistics Canada, Census of Population, 2006.

Women in their early forties who have only pre-school children have higher incomes

In general, women in their early forties who have one or more preschool children (and therefore gave birth to their first child at the age of 35 or older) have higher incomes than women who have older children.

For example, in 2005 the median personal income of women aged 40 to 44 who had one or more pre-school children was \$27,500 after taxes, which is more than women who had both school-age and pre-school children (\$24,500) and more than women who had only children aged 12 and over (\$25,600) (Table 3).

If we limit the comparison to women with paid work, we see that the median income of women aged 40 to 44 whose children were all under 5 years old was \$5,000 more than women in the same age group

whose children were all age 12 or older. Moreover, the lower threshold for being in the top 25% of personal income earners was \$49,300 for women who only had pre-school children, compared with \$39,400 for women whose children were 12 or older.

These results are consistent with the findings of a Statistics Canada study which showed that women who delayed childbearing earned higher salaries, even when a number of other factors affecting salary were taken into account.¹²

The pattern is the same for family income. Women who have only young children live in families that have higher average and median incomes than women who have older children. Their family income is also more likely to be close to \$100,000 a year than that of other mothers: in 2005, a quarter of them lived in families

whose income (after taxes) was more than \$96,600.

Many mothers in their forties are providing assistance and support to an elderly person

Work-life balance is a concern for most parents with paid work. For women in their forties who have young children, the issue may be of particular consequence. Caring for young children takes, on average, more time than looking after older children. That is true regardless of the mother's age. However, more women in their forties have aging parents, who may need care or assistance. How much care and assistance do mothers of young children provide to an elderly person on top of the time they spend with their young families?

As shown in Table 4, older mothers of pre-school children spent more

GST	Table 3	After tax income quartiles of mothers aged 40 to 44 years old, by age of their child(ren), 2006	
-----	---------	---	--

		Mothers 40 to 44 years old						
	whose child(ren) are aged 0 to 4 only	whose child(ren) are aged 0 to 4, and 5 years old and more	whose youngest child is between 5 and 11 years	whose child(ren) are 12 and older				
		in de	ollars					
Personal income after taxes	in 2005							
Average	32,000	29,400	31,000	27,800				
Bottom quartile	0	0	0	0				
Second quartile	12,000	11,300	14,000	14,600				
Third quartile (median)	27,500	24,500	27,600	25,600				
Top quartile	43,800	40,100	41,700	37,000				
Personal income after taxes	in 2005 of women with paid work	(
Average	39,000	36,400	35,400	31,000				
Bottom quartile	0	0	0	0				
Second quartile	20,900	19,700	20,000	18,800				
Third quartile (median)	33,700	32,300	32,100	28,700				
Top quartile	49,300	47,000	45,200	39,400				
Family income after taxes in	2005							
Average	80,000	79,400	78,800	70,700				
Bottom quartile	0	0	0	0				
Second quartile	43,700	43,100	44,000	41,200				
Third quartile (median)	68,200	66,200	67,400	64,200				
Top quartile	96,600	95,000	95,000	89,400				

Note: The amount at the lower level of the third quartile corresponds to the median revenue for the group in question.

Source: Statistics Canada, Census of Population, 2006.

Table 4 Number of hours spent on childcare and on providing care to a senior, by mothers 40 to 44, by age of child(ren), 2006

	Mothers aged 40 to 44 years old						
	whose child(ren) are aged 0 to 4 only	whose child(ren) are aged 0 to 4, and 5 years old and more	whose youngest child is between 5 and 11 years	whose child(ren) are 12 and older			
		perce	entage				
Childcare							
No	3.3	3.6	4.4	25.9			
Yes	96.5	96.5	95.7	74.0			
Number of hours per week							
Less than 5	1.4	2.2	3.9	14.8			
5 to 14	6.9	9.0	18.5	24.1			
15 to 29	16.2	18.0	24.6	15.3			
30 to 59	27.8	24.5	23.0	9.0			
60 or more	44.2	42.8	25.7	10.8			
Senior care							
No	76.3	73.6	71.5	71.1			
Yes	23.7	26.4	28.6	28.9			
Number of hours per week							
Less than 5	13.9	15.9	17.8	18.0			
5 or more	9.8	10.5	10.8	10.9			

hours caring for their children than women who had children aged 12 and over. On the other hand, they were less likely to be caring for an elderly person. However, the difference between mothers of pre-school children and mothers of school-age children was not especially large: 23.7% of women whose children were all of pre-school age had provided assistance or support to an elderly person, compared with 28.9% of women whose children were all aged 12 or over. In addition, women with young children were nearly as likely as women with children aged 12 or over to spend five or more hours a week caring for an elderly person (9.8% versus 10.9%)

Some mothers may feel the pressures of this dual role. 13 In 2006, 7.9% of women aged 40 to 44 who had young children spent 30 or more hours a week looking after their children and five or more hours caring for an elderly person. The corresponding proportion for women

whose children were all aged 12 or over was 3.6% (results not shown).

Summary

Women who have pre-school children in their forties are still in the minority, but the phenomenon is not as uncommon as it was 20 years ago. Since 1986, the proportion has more than doubled. In 2006, nearly one out of 10 women aged 40 to 44 had a preschool child, more than double the proportion observed in 1986 (8.9% versus 4.3%).

Length of schooling is an important factor in explaining that increase. Immigrant women, who are more likely to have a university degree, are also more likely to have a young child when they are in their forties. The fact that the proportion of women who are university graduates, including those with master's degrees and doctorates, continues to grow suggests that the proportion of women in their forties who have small children will also rise.

The professional and economic situation of women in their forties who have pre-school children is appreciably different from that of women in the same age group who had their children earlier. The study showed that the occupations with the highest percentages of these mothers in their forties were those which required a high level of skill and more education, such as in medicine, law, and engineering and university teaching. There were higher concentrations of them in major urban centres such as Toronto and Vancouver, which are home to many jobs requiring advanced skills. They also belonged to the higher-income segments of the population.



Mireille Vézina are analysts in the Social and Aboriginal Statistics Division at Statistics Canada.

- Bushnik, T., and Garner, R. (2008). The children of older first-time mothers in Canada: Their health and development. Children and Youth Research Paper Series, 005. Statistics Canada Catalogue no. 89-599-M.
- 2. Statistics Canada, Health Statistics Division and Demography Division.
- United Nations. (2004). World Population Monitoring 2003: Population, Education and Development. New York: Department of Economic and Social Affairs, Population Division.
- 4. United Nations. (2004).
- Becker, G. (1991). A Treatise on the Family. Cambridge, MA: Harvard University Press
- 6. United Nations. (2004).
- Rindfuss, R. R., Morgan, S. P., and Orfutt, K. (1996). Education and the changing age pattern of American fertility: 1963-1989. Demography, 33(3), 277-290.
- Clark, W. (2007). Delayed transitions of young adults. Canadian Social Trends, 84, 14-23. Statistics Canada Catalogue no. 11-008.

- Kravdal, Ø., and Rindfuss, R. R. (2008). Changing relationship between education and fertility: A study of women and men born 1940 to 1964. American Sociological Review, 73(5), 854-873.
- Caron-Malenfant, É., and Bélanger, A. P. (2006). The fertility of visible minority women in Canada. In A. P. Bélanger (Ed.), Report on the Demographic Situation in Canada, 2003-2004 (pp. 79-95). Statistics Canada Catalogue no. 91-209-XPE. Ottawa: Ministry of Industry.
- 11. Occupations according to the National Occupational Classification Statistics (NOC-S) 2006. Retrieved July 21, 2009 from http://www.statcan.gc.ca/subjects-sujets/standard-norme/soc-cnp/2006/noc2006-cnp2006-menu-eng.htm
- Drolet, M. (2002). Wives, mothers and wages: Does timing matter? Analytical Studies Branch—Research Paper Series, 186. Statistics Canada Catalogue no. 11F0019MIE.
- Williams, C. (2005). The sandwich generation. Canadian Social Trends, 77, 16-21. Statistics Canada Catalogue no. 11-008.

Need more information from Statistics Canada?

Call our inquiries line:

1-800-263-1136

To order publications:

Order line: 1-800-267-6677 Internet: infostats@statcan.gc.ca TTY line: 1-800-363-7629

Accessing and ordering information

Canadian Social Trends
Print format, semi-annual
(twice per year)*
(Catalogue no. 11-008-X) \$24 per issue,
\$39 per annual subscription

PDF/HTML format, every 6 weeks (Catalogue no. 11-008-X): Free

 A CST print anthology is now issued twice a year. The anthology contains all the CST articles released electronically in the previous six months, and the subscription price remains the same

Education and Library Discount: 30% discount (plus applicable taxes in Canada or shipping charges outside Canada)

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "Providing services to Canadians."

If you're on the move...

Make sure we know where to find you by forwarding the subscriber's name, old address, new address, telephone number and client reference number to:

Statistics Canada
Finance
R.H. Coats Bldg., 6th Floor
150 Tunney's Pasture Driveway
Ottowa, Ontario K1A 076
or by phone at 1-800-263-1136 or
1-800-267-6677; or

by fax at 1-877-287-4369; or by Internet at infostats@statcan.gc.ca We require six weeks advance notice to ensure

We require six weeks advance notice to ensure unintercupted delivery, so please keep us informed when you're on the move!

Do parental benefits influence fertility decisions?

by Susan Crompton and Leslie-Anne Keown

part from the baby boom of the late 1940s to mid 1960s, In fertility in Western countries has been dropping since the 1870s. Most demographers would agree that this is a natural corollary to socio-economic development and improved living conditions. But with the total fertility rate falling below the replacement level of 2.1 surviving children per woman of reproductive age,² economists fear that the workingage population will find it difficult to sustain an ageing population. As such, supporting the creation and well-being of young families has become an important policy issue for most Western governments.

In theory, encouraging young people to have families shouldn't be difficult since most of them still want to have children. But although fertility intentions can be accurate indicators of behaviour over a lifetime, 3.4 over the short-term people generally make fertility decisions one birth at a time. 5.6.7.8 So while personal factors and beliefs may have a positive influence on fertility intentions, social factors can dampen the decision to act.

For example, researchers argue that even when people are economically successful, the cost of raising children in modern Western societies has become so high in terms of lost career opportunities that having more than two children may be undesirable, especially for highly-educated dual-earner couples. 9,10,11,12

Nevertheless, there are signs that young couples can be persuaded to fulfill their ambitions to have a family. Although some Canadian fertility research shows that pronatalist policies may have an impact only on people who are wavering in their decision to have children, ^{13,14} recent international studies find significant evidence for the positive fertility effects of policies that support working parents. ^{15,16}

Using the 2006 General Social Survey on family transitions, this article asks whether access to parental benefits influences a couple's decision to have a child. We identify the characteristics of people who might be most amenable to this type of policy in transforming intentions into behaviour. The study population includes individuals aged 18 to 45 who are married or living common-law and intend to have a child (first or subsequent) sometime in the future (for concepts and definitions, see "What you should know about this study").

Dealing with the gender gap

Not unexpectedly, there is a consistent gender gap across all

demographic and socio-economic characteristics and decision-making factors examined in this study. Women were more likely than men to report that access to maternity/paternity benefits was "very important" to their fertility decisions, irrespective of other factors. The magnitude of this gap remains consistent, with the difference generally ranging between 14 and 18 percentage points. The tables and charts contain results for women and men. For the sake of brevity, in the text we will generally discuss results for both sexes only unless substantive differences warrant special mention.

Socio-demographic factors have little impact on the perceived importance of parental benefits

In 2006, 46% of people in the study population said that access to parental benefits would be a "very important" factor to them when deciding to have a child (Chart 1) (Table 1). Women were much more likely than men (54% versus 38%) to report that such benefits would play a role in their decision-making.

This gender difference may reflect not only the greater employment-related risks women accept when raising children,^{17,18} but also eligibility for benefits and uptake rates. Simply put, a benefits program may be less

GST What you should know about this study

This article is based on data from the 2006 General Social Survey (GSS) on family transitions. This survey monitors the changes in the structure of families with respect to marriages, common-law unions, children and fertility intentions. The GSS collected information from 23,600 individuals aged 15 and over living in the ten provinces.

This study focuses on individuals aged 18 to 45 who were married or living common-law and intended to father or give birth to a first or a second child. The restriction on marital status is imposed because research has shown that the responses of people in couples are generally more accurate predictors of short-or medium-term behaviour than those of other respondents. This limitation on the study population produces a sample of approximately 1,480 respondents representing about 2.0 million Canadians, that is, about 31% of the population aged 18 to 45 married or living commonlaw.

The analysis is based on response to the following question presented in the fertility intentions module of the questionnaire:

The next questions are about your intentions to father/give birth to (more) children. How important are the following factors in deciding to have a/another child? How important is:

- ... access to maternity/paternity benefits?

 Is it:
- 1 Very important
- 2 Somewhat important
- 3 Not very important
- 4 Not at all important

This article focuses only on the characteristics of respondents answering "very important," since a "very important" response is more likely to identify an issue that may present a barrier to fertility behaviour. In examining only "very important" respondents, we have chosen a more conservative approach to the analysis.

Definitions

Access to parental benefits (maternity/paternity):

Parental benefits are paid to individuals who are pregnant, have recently given birth, are adopting a child or are caring for a newborn. Benefits may be provided by private employers as well as government programs provided the candidates meet the eligibility requirements. Under the federal Employment Insurance (EI) program, maternity benefits can be paid up to a maximum of 15 weeks, parental benefits can be paid up to a maximum of 35 weeks. Employers may "top up" these benefits with their own programs, extending the length of parental leave, increasing the amount of benefits paid, or both. Additionally, parental benefit programs in Canada offer job protection for those who use paid or unpaid maternity or parental leave during the first 52 weeks after the birth of a child. Data were not collected on whether the respondent was/would be eligible for parental benefits.

Very important: respondent rated access to maternity/ paternity benefits as "very important" in deciding to father or give birth to a child or another child.

Less important: respondent rated access to maternity/ paternity benefits as "somewhat important," "not very important" or "not at all important" in deciding to father or give birth to a child or another child.

The model

In order to isolate individual factors having an influence on child-bearing intentions, a logistic regression model was utilized. This allowed for the estimation of the odds that benefits were *very important* compared to *less important* for respondents with a given characteristic, while removing the effect of other factors. Models were run for both sexes as well as for women and men separately.

Odds ratios were estimated through a weighted regression that used GSS survey weights, with variance estimation done through survey bootstrapping. Statistical significance was calculated at p < 0.05. Variables in the models include individuals' socio-demographic and economic characteristics, as well as a set of fertility decision-making factors.

Data limitations

Readers should be aware that the way the data were collected by the GSS imposes certain limitations on the analysis. Most importantly, the questions were asked only of people who said they intended to have children. Therefore, we do not know how access to parental benefits might influence people who say they do not intend to have children, people who do not know whether or not they will have children (or more children), or even how access to benefits might have influenced people who have completed their families.

GST What you should know about this study (continued)

Secondly, there is no information about the timing of the intended birth; that is, we do not know whether the respondent plans to have a (another) child within a certain time frame or just "some day." However, research shows that while timing data is the best predictor of actual births, the intention to have a child is also a very accurate indicator.²

- See, for example, Toulemon, L., and Testa, M.R. (2005). Fertility intentions and actual fertility: A complex relationship. Population and Societies, 415(September), 1-4.
- Miller, W.B. and Pasta, D.J. (1995). Behavioral intentions: Which
 ones predict fertility behavior in married couples? Journal of
 Applied Social Psychology, 25(6), 530-555.

relevant to men if they do not qualify for it or see little value in using it; for example, although changes to EI parental benefits in 2000 did increase the percentage of new fathers claiming benefits, the great majority of men still did not take time off from their job when their children were born.¹⁹

However, the results of the regression model show that ultimately, the influence of gender disappears once we control for other factors.

Women have no higher odds than men of reporting that parental benefits are very important when deciding to have a child (Table 2).

Other socio-demographic characteristics—age, marital status, religious belief—might be expected to play a role when couples are deciding whether to have a child. For example, many young adults are struggling to find their feet financially, 20 and a benefits program that helps control the risk of leaving the labour market

to have children might be very attractive.²¹ But in fact, young adults under 30 are no more likely than average to report that benefits would be very important to them. Nor was age significant even after taking other variables into account (Table 2).

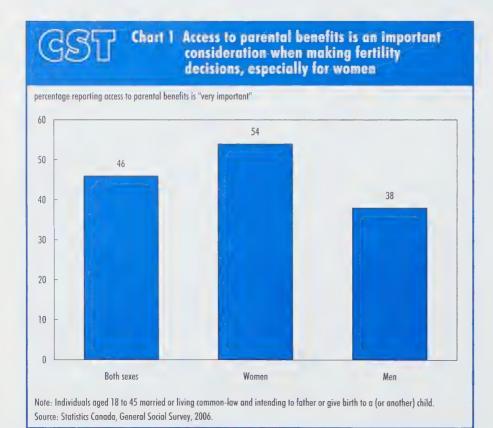
The same is true of marital status, with people in common-law couples and in married couples no more likely than average to regard benefits as "very important" to their plans to have a child.

The positive effect of religion on fertility has been noted in earlier studies. ^{22,23,24} However, after other factors are taken into account, a person's religious affiliation or frequency of attendance at religious services does not affect whether they consider access to parental benefits a critical element in any fertility decision.

Parents more likely to include access to parental benefits in future fertility decisions

Adults who already had a child valued the importance of parental benefits more than those who had not yet started a family. An above-average proportion (55%) of first-time parents acknowledged that parental benefits would play a big role in the decision to have a second child. Even after controlling for other variables, the number of birth children remained a significant factor in this decision.

On the other hand, while people with a preschool-age child at home were more likely than average to



describe parental benefits as "very important" (50%), this effect was no longer significant when other variables were accounted for.

Parental leave programs also reduce the labour market risk of child-bearing by providing financial benefits to those who qualify, in addition to offering job protection to those taking paid or unpaid maternity or parental leave. Over half (56%) of people who had taken parental leave at the birth of a child said they would seriously weigh access to benefits in any subsequent fertility decisions. But its effect is not significant when other factors are taken into account.

Income and future income strongly influence importance of benefits in planning a family

Many studies in Western countries have documented the link between unemployment or economic uncertainty and delays in childbearing, ^{25,26,27} especially with respect to the probability of having a first child. ²⁸ As we might expect, people with the lowest incomes are most likely to report that a benefits program would be very important to their fertility decisions.

Over half (56%) of people with household incomes under \$30,000 identify parental benefits as "very important," but only one-third (32%) of people with incomes over \$100,000 do the same. The regression results show that, compared to the highest income group, the odds of identifying parental benefits as "very important" are almost two to three times higher for people with incomes under \$100,000 (depending on their actual income).

A high level of education is associated with higher incomes, as well as lower unemployment and better job benefits. Indeed, 41% of university graduates report access to parental benefits would strongly influence their decision to have a child, compared with almost one-half of those without a university degree. After other variables are controlled for, degree-holders still have

significantly lower odds of identifying benefits as "very important" than people with less education.

For many couples, parental benefits may be seen as helping to safeguard the family's attachment to employment during one partner's absence from the labour force. This may be especially true of couples in which both spouses work, however almost as many people in dual-earner families as in single-earner families (47% versus 42%) describe benefits as playing a "very important" role in their fertility decisions. In contrast, the regression results uncover a different pattern. Individuals in dual-earner families have over twice the odds of giving parental benefits a major role in fertility decision-making than people in other types of families.

Parental benefits play a less important role in Quebec

Only 39% of Quebecers stated that parental benefits would play a prominent role in their fertility decisions; this proportion was significantly below the Canadian average. The gap remains significant even after controlling for all other factors: the odds of saying benefits are "very important" are only half as great for Quebec residents who want to have a child, compared to Canadians living in the other provinces.

This difference may be partly attributable to the disparate socio-cultural values often observed between Quebec and the rest of Canada. But acknowledgement should also be given to Quebec's unique daycare system and other pro-family programs, ²⁹ which many Quebecers may see as complements or alternatives to parental benefits available from other sources.

Parental benefits have little influence on immigrants' fertility plans

For people who have come to Canada relatively recently, parental benefits may be viewed as particularly valuable. By providing a flow of income, or promising to hold open a job (and often both), parental benefits can help control the risk of starting a new family in a new country. An above-average 55% of immigrants who arrived as adults ranked access to benefits as very important in their fertility decisions. However, immigrant status does not have a significant influence once the effects of all other variables have been controlled for.

Finances and work-life balance major considerations for people planning to have children

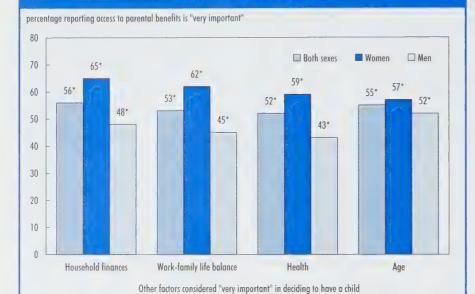
Other factors beyond an individual's demographic and socio-economic characteristics also play a role in planning a family. Questions about household finances, work-life balance, health and age (their partner's as well as their own) are taken into consideration by the majority of couples before they decide to have a child.

In a 2004 survey by the Vanier Institute of the Family, most Canadians said being able to afford children and having "enough time" are key factors in the decision to become a parent.³⁰ The 2006 GSS data confirm that people in couples who are thinking about having children tend to agree with this finding (Chart 2). The odds that parental benefits would be "very important" to their fertility decisions were almost twice as high for people who also gave financial readiness a major role in their family planning (Table 2).

The need to maintain an acceptable equilibrium between family and work responsibilities has an even greater impact. The odds that parental benefits would be very important were more than three times higher for people who thought work-life balance would also be a key factor in deciding to have a child. These results suggest that in a society where dualearner families are now the norm, safeguarding the well-being of the family both in the labour market and in the home is of primary interest to couples.



Chart 2 Women report household finances, men report age as the most important factors in decision to have a child



* statistically significant difference from reference group that is 46% for both sexes; 54% for women; 38% for men (see Chart 1).

Note: Individuals aged 18 to 45 married or living common-law and intending to father or give birth to a (or another) child.

Source: Statistics Canada, General Social Survey, 2006.

Naturally, the biological imperatives of child-bearing also comprise a critical element of a couple's fertility decisions. Not unexpectedly, this is the point at which the findings for women and men diverge: health and age are the only two factors where the results of the model show significantly different effects for women compared to men

Once other variables are controlled for, women whose health would be a key factor in their decision-making had 2.7 times higher odds of assigning parental benefits a principal role as well. But health had no influence on men's opinions.

On the other hand, men who perceived that age was an important factor had much higher odds of stating that parental benefits were very important in deciding to have a child than women did.

Summary

Although most Canadians dream of having a family, the total fertility rate remains below the replacement level of 2.1 children per woman. Many demographers and sociologists agree that young people would only be encouraged to have more children if the risks of childrearing were shared by the society that profits from a young, vibrant and productive population. Parental benefits to help new parents who temporarily leave their jobs while they care for their newborn is one way of offering encouragement.

The findings of the 2006 General Social Survey show that people in couples who want to have children are significantly more likely to consider access to parental benefits as "very important" to their fertility decisions if: they already have a child; they are part of a dual-earner couple; and they have a household income of less than \$100,000 a year. When the time comes to choose whether or not to have a child (or another child), benefits play a key role for people who also assign high value to their household's financial preparedness, the family's work-life balance, and their health.



Susan Crompton and Leslie-Anne Keown are senior analysts with Canadian Social Trends, Social and Aboriginal Statistics Division at Statistics Canada.

- Hirschman, C. (2005). Population and society: Historical trends and future prospects. In C. Calhoun, C. Rojek, and B. Turner (Eds.), The Sage Handbook of Sociology (pp. 381-402). Thousand Oaks, CA: Sage Publications.
- 2. Statistics Canada. (2008, September 26). Births. The Daily. Statistics Canada Catalogue no. 11-001-XIE. In 2006, the Canadian total fertility rate was 1.59 surviving children per woman of reproductive age.
- Wu, Z., and Wang, H. (1998). Third birth intentions and uncertainty in Canada. Social Biology, Spring-Summer 45(1-2), 96-112.
- Miller, W. B., and Pasta, D. J. (1995). Behavioral intentions: Which ones predict fertility behavior in married couples? Journal of Applied Social Psychology, 25(6), 530-555.
- Toulemon, L., and Testa, M. R. (2005). Fertility intentions and actual fertility: A complex relationship. Population and Societies, 415(September), 1-4.
- 6. Schreck, L. (1999). Men and women gave similar fertility intentions. Family Planning Perspectives, 31(5), 254-255.
- Schoen, R. et al. (1999). Do fertility intentions affect fertility behaviour? *Journal* of marriage and the family, 61 (August), 790-799.
- Udry, J. (1983). Do couples make fertility plans one birth at a time? Demography, 20(2), 117-128.
- 9. Hirschman. (2005).
- 10. Wu and Wang. (1998).
- Gauthier, A.H. (2007). The impact of family policies on fertility in industrialized countries: A review of the literature. Population Research and Policy Review, 26, 323-346.
- 12. Zhang, X. (2009). Earnings of women with and without children. *Perspectives on Labour and Income*, 10(3), 5-13. Statistics Canada, Catalogue no. 75-001-X.
- Hyatt, D. E., and Milne, W. J. (1991). Can public policy affect fertility? Canadian Public Policy / Analyse de Politiques, 17(1) (March), 77-85.

Table 1 Percentage reporting that access to parental benefits is "very important" in deciding to have a child

	Both sexes	Women	Men	Difference
		percentage		percentage
Both sexes (overall) †	46	54	38	points 16
Women	54*			
Men	38*	***		
Age group	00	•••	• • •	•••
18 to 24 years	42	40	35€	11
25 to 29 years	52	57	40	17
30 to 39 years	44	53	38	15
40 to 45 years	49	74 [[]	40 [£]	34* ^E
Marital status	17	7 T	40	74
Married	48	57	40	17
Common-law	43	50	35	15
Religious affiliation	40	30	33	13
None	42	51	35	1/
Cotholic	47	54		16
Protestant	47	50	40 37	14
Other	43 54	69	37 38 ^ξ	13 31*E
Religious attendance	54	07	38	31.
Seldom	47	C 4	20	1./
Monthly	46	54	38	16
Number of birth children	46	53	38	15
	40	5.1	٥٢	2.4
None	43	51	35	16
One	55*	63*	47*	16
Two or more	36*	44*	29*E	15
Child under 5 in household		••		
No	44	52	35	17
Yes	50*	57	43	14
Previous parental leave				
No	44	52	38	14
Yes	56*	58	48 ^E	10*E
Dual-earner couple				
No	42	48	37	11*E
Yes	47	56	39	17
Household income				
Less than \$30,000	56*	56	56*	0 *
\$30,000 to \$59,999	46	54	37	17
\$60,000 to \$99,999	46	55	39	16
\$100,000 or more	32*	39*	28*	11*
Not stated, refused	64*	72*	55*	17
University degree, respondent				
No	48	58	40	18
Yes	41*	48*	33	15
University degree, spouse				
No	48	55	39	16
Yes	44	53	37	16
Reside in Quebec				
No	49	57	41	16
Yes	39*	47*	31*	16
Born in Canada	07	77	01	10
Yes	44	51	36	15
No, arrived as child	55*	69*	44	12*
No, arrived as clina No, arrived as adult	55*	61*	49	25*
AU, antived us addit	22	01	47	7.2

reference group is overall average for the 3 columns: 1) both sexes; 2) women; 3) men

statistically significant difference from reference group at $p\,<\,0.05$

Note: Individuals aged 18 to 45 married or living common-law and intending to father or give birth to a (another) child.

Source: Statistics Canada, General Social Survey, 2006.

Table 2 Odds ratios of reporting that parental benefits are "very important" in deciding to have a child

	Both sexes	Women	Men		Both sexes	Women	Mei
		odds ratios				odds ratios	
Sex				Household income			
Women †	1.0			Less than \$30,000	2.8*	3.1*	3.
Men	0.9			\$30,000 to \$59,999	2.0*	2.9*	1.
Age group				\$60,000 to \$99,999	1.7*	2.1*	1.
18 to 24 years	0.7	0.5	1.0	\$100,000 or more †	1.0	1.0	1.
25 to 29 years	1.2	1.1	1.1	Not stated, refused	3.7*	4.7*	3.
30 to 39 years †	1.0	1.0	1.0	University degree, respon	dent		
40 to 45 years	1.2	1.5	1.1	No †	1.0	1.0	1.
Marital status				Yes	0.7*	0.6*	0,
Married	1.4	1.4	1.3	University degree, spouse			
Common-law †	1.0	1.0	1.0	No †	1.0	1.0	1.
Religious affiliation				Yes	1.1	1.1	1.
None †	1.0	1.0	1.0	Reside in Quebec			
Catholic	1.4	1.3	1.4	No †	1.0	1.0	1
Protestant	1.0	0.8	1.3	Yes	0.6*	0.6*	0
Other	1.2	1.8	0.9	Born in Canada			
Religious attendance				Yes †	1.0	1.0	1.
Seldom †	1.0	1.0	1.0	No, arrived as child	1.4	1.5	1.
Monthly	0.8	0.9	0.8	No, arrived as adult	1.2	1.2	1
Number of birth children				Importance of household	finances		
None	1.5	1.3	1,7	Less important †	1.0	1.0	1
One	2.7*	2.8*	3.0*	Very important	1.9*	1.9*	2.
Two or more †	1.0	1.0	1.0	Importance of work-famil	y life balance		
Child under 5 in household				Less important †	1.0	1.0	1
No †	1.0	1.0	1.0	Very important	3.2*	3.5*	2.
Yes	1.1	1.0	1.2	Importance of health			
Previous parental leave				Less important †	1.0	1.0	1
No †	1.0	1.0	1.0	Very important	2.7*	2.7*	1
Yes	1.5	1.2	2.0	Importance of age			
Dual-earner couple				Less important †	1.0	1.0	1
No †	1.0	1.0	1.0	Very important	0.8*	0.8*	1
Yes	2.1*	2.5*	2.1*	Interactions			
				Interaction Health x Gender	0.4*		
				Interaction Age x Gender	2.2*		

reference group

Note: Individuals aged 18 to 45 married or living common-law and intending to father or give birth to a (another) child.

Source: Statistics Canada, General Social Survey, 2006.

statistically significant difference from reference group at $\rm p < 0.05$

- 14. Phipps, S. A. (2000). Maternity and parental benefits in Canada: Are there behavioural implications? Canadian Public Policy/Analyse de Politiques, 26(4) (December), 415-436.
- Sleebos. (2003). Low Fertility Rates in OECD Countries: Facts and Policy Responses. OECD Labour Market and Social Policy Occasional Papers, No. 15. Paris: OECD Publishing.
- D'Addio, A. C., and Mira D'Ercole, M. (2005). Policies, Institutions and Fertility Rates: A Panel Data Analysis in OECD Countries. Paris: Organisation for Economic Co-operation and Development.
- 17. McDonald. (2006).
- Tudiver. (2005). Exploring fertility trends in Canada through a gender lens. Health Policy Research Bulletin, 10(May), 7-10.

- Marshall, K. (2003). Parental leave: More time off for baby. Canadian Social Trends, 71(Winter), 13-18. Statistics Canada, Catalogue no. 11-008-XWE.
- Clark, W. (2007). Delayed transitions of young adults. Canadian Social Trends, 84(September), 13-20. Statistics Canada Catalogue no. 11-008-XWE.
- 21. Clark. (2007).
- 22. Corijn, M., Liefbroer, A. C., and de Jong Gierveld, J. (1996). It takes two to tango, doesn't it? The influence of couple characteristics on the timing of the birth of the first child. *Journal of Marriage and the Family*, 58(1)(February), 117-126.
- 23. Wu and Wang. (1998).
- 24. Thomson, E. (1997). Couple childbearing desires, intentions and births. *Demography*, 34(3) August, 343-354.
- 25. Martel, L., and Bélanger, A. (1999). Relative income opportunity cost and fertility changes in Canada. In A. Bélanger and S. Gilbert (Eds.), Report on the Demographic Situation in Canada, 1998-1999 (pp. 123-163). Statistics Canada, Catalogue no. 91-209-XPE. Ottawa: Minister of Industry.

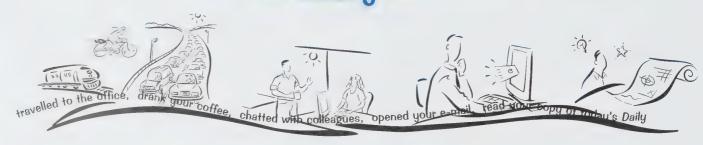
- 26. D'Addio and Mira d'Ercole. (2005).
- 27. Grant, J., Hoorens, S., Sivadasan, S., van het Loo, M., DaVanzo, J., Hale, L., Gibson, S., and Butz, W. (2004). Low Fertility and Population Ageing: Causes, Consequences and Policy Options. A European Commission Report, MG-206-EC. Santa Monica, CA: Rand Corporation.
- 28. Toulemon and Testa (2005).
- 29. Gauthier, A. H. (2007). The impact of family policies on fertility in industrialized countries: A review of the literature. Population Research and Policy Review, 26, 323-346.
- 30. Bibby, R. (2004). The Future Families Project: A Survey of Canadian Hopes and Dreams. Ottawa: Vanier Institute of the Family.

The Daily Routine



Statistics Canada official release bulletin, every working day at 8:30 a.m. (Eastern time)

This morning, like every morning, you:



Is that right? You didn't read *The Daily*? Did you know that it's the best source of statistical information in the country?

ach working day,
The Daily provides economic and
social data that's available free of
charge on our Web site. Journalists
never miss it. Business leaders and
policy makers use it to make sound
decisions.

All new data from Statistics Canada must be officially announced in *The Daily*. So if you read it every day, you don't miss a thing!

The Daily delivers news directly from Statistics Canada—with easy-to-read news releases, informative tables and simple charts that clearly illustrate the news.



Subscribe to *The Daily*. It's FREE.

Visit www.statcan.gc.ca to read
The Daily when you need it.
Or subscribe to the free online
delivery service and receive
The Daily automatically
by e-mail.

Add it to your dayto-day activities!

Living with disability series

Defining disability in the Participation and Activity Limitation Survey

by Andrew MacKenzie, Matt Hurst and Susan Crompton

efining disability is a difficult task. A multitude of perceptions surrounds the question of what constitutes a disability, and a disability to one person can be a typical part of life to the next. To confuse the issue further, perceptions of disability are fluid and everchanging as society evolves and the sources of information about disability continue to change as well.

Over the course of the next few months. Canadian Social Trends is planning to release several articles that use the national Participation and Activity Limitation Survey (PALS) to examine a variety of issues related to disability. In this first article of the "Living with disability series," we briefly explore the evolution of theories about disability and outline contemporary thinking about how to define disability. We then compare PALS data from 2001 and 2006 to see how the incidence of disability is growing in Canada, and the proportion of growth that is due to changing public perceptions of disability.

The ever-changing concept of disability

Disability is a fluid concept and societal conceptions of disability have shifted dramatically over time. Before the 20th century, many early conceptions of disability involved religious and supernatural explanations. These interpretations ranged from karma, ¹ God's will or a test from God, ^{2,3} reincarnation, ⁴ and divine protection, ⁵ to name just a few.

Many western cultures subsequently moved away from religious and supernatural explanations toward more scientific conceptions of disability. However, the rise of the scientific method of analysis also gave rise to a major obstacle for people with disabilities, namely the "medical model of disability." 6

The medical model of disability is oriented towards clinical diagnosis, treatment, cure and prevention. It focuses on the individual in terms of their deficiencies, ailments or inabilities. The model is interested in medical facts whereby disability is caused by a physiological disease or injury resulting in a "damaged" body or mind that does not function in a manner considered normal for a human being. As such, it ignores the fact that society organizes itself based on certain assumptions, one of which is that everyone is ablebodied. Having to navigate through a world designed to meet the needs and convenience of the able-bodied can marginalize people who are not

able-bodied, affecting their physical, social, political and financial well-being

In 1965, this "medical model" of disability began to change. That year marked the publication of a seminal article that proposed a whole new approach to thinking about disability. Author Saad Nagi argued that every day, people with disabilities encounter barriers to their daily activities that are not caused by their impairments, but by an environment that does not take account of their impairment. In other words, it is this inattention that creates disability; for example, the building that does not include wheelchair ramps; the conference that doesn't provide sign language interpretation for attendees with hearing limitations; or the doctor who doesn't clearly explain how to take a new medication to someone with cognitive difficulties. In other words, Nagi proposed, disability is effectively a social disadvantage that an unsupportive environment imposes on top of an individual's impairment.⁷

The 1965 article was the major breakthrough for Nagi's concept of disability. The idea flourished in the 1980s and 1990s, and developed into the "social model of disability." The basic concept—that disability is related to the way an able-bodied

society organizes its physical, political, economic, and social relationships—has had a profound impact on thinking about disability in western cultures. Some researchers have come to view disability as "a loss of civil rights rather than simply a physical impairment." And while it is true that this new model has been the topic of much debate during its relatively short life, it now underlies most discussions of disability.

Putting the social model into practice

The social model's greatest success is arguably its adoption by the World Health Organization (WHO), which has used it to develop its most recent (2001) classification system of disability. The system is designed to provide a universal framework for measuring, thinking and communicating about disability, and is intended to be used for both clinical and statistical studies.

The first WHO disability classification system was introduced in 1980. Although the ICIDH (International Classification of Impairment, Disability and Handicap) acknowledged the functional difficulties stemming from a health condition, it retained many features of the "medical model." It modelled disability as a sequence of events, beginning with an illness or injury that caused a change or impairment to a person's ordinary level of functioning. This impairment produced a disability if a person had difficulty performing an activity in a "normal manner"; and the disability produced a handicap if a person was limited in fulfilling a "normal role" in society.9

Almost from its inception, there was dissatisfaction with the ICIDH, and development of a classification system that reflected the social model of disability continued throughout the 1980s and 1990s. In 2001, the ICF (International Classification of Functioning, Disability and Health) was approved by all WHO member states. Unlike the uni-directional "straight line" approach of the

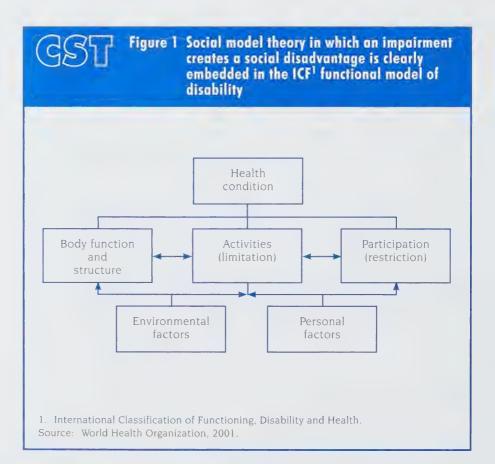
ICIDH, the ICF describes disability as a complex set of relationships in which various factors can operate on the individual's impairment, both directly and indirectly; it also expands the number of factors affecting the individual to include the larger society. These factors include: the everyday activities the individual undertakes (activities); individual characteristics, such as education, income, family and friends, motivation, and so on (personal factors); their involvement in social and community relationships and events (participation); and their general environment, which includes the physical, social, financial and political elements that make it easier or harder to function day-to-day (environment) (Figure 1).

How did Statistics Canada implement the WHO definitions?

To develop a survey on disability, one of the first steps is to decide upon a conceptual model that defines what is considered a disability.

Statistics Canada's Health and Activity Limitation Survey (HALS), conducted in 1986 and again in 1991, adopted the 1980 ICIDH model of disability. HALS was Statistics Canada's first post-censal disability survey¹⁰ and it produced important information about the demographic and socioeconomic characteristics of people with disabilities, the type and severity of their disabilities, and their day-to-day living experiences.

When planning began in 1997 for the 2001 post-censal disability survey, 11 it was decided to adopt a draft version of the ICF as its underlying framework. The draft ICF contained a description of what was and what was not considered a disability or activity limitation, while simultaneously acknowledging the effects of the environment on impairment. Moreover, the definition of disability as occurring only when someone feels they are prevented from participating in desired or necessary activities lends itself very



well to survey applications: when the respondents themselves determine the extent to which they are limited by their condition, the survey does not need to judge whether a condition is or is not disabling. In other words, the survey only needs to ask the right questions and let the respondents decide

After adopting the ICF concept of functional disability, the first hurdle for the new Participation and Activity Limitation Survey (PALS) was dealing with more than 1,400 different dimensions the ICF uses to describe possible forms of disability. But instead of using the body functions and structures components of the ICF, the PALS survey designers assumed that if a respondent had difficulties in day-to-day living associated with body functions and structures, then these would show themselves in other areas, such as the activity limitation, participation restriction, and environment elements that PALS had adopted from the ICF. Having made this decision, they then identified the most common types of disabilities (including chronic pain) based on existing data from HALS. By combining the most common types of disabilities with the material selected from the ICF, the PALS design team developed screening criteria for the survey questionnaire.

They chose the bulk of these screening questions by matching an ICF item for a given disability type with a question drawn from a bank of pre-tested questions about activities of daily living. These questions ask respondents to specify activities they have difficulty accomplishing because of a health problem or condition, for example, climbing stairs, hearing or learning. Using this cross-referencing approach, the PALS team was able to identify and select a large sample of the disabled population into the survey. Once the screening questions were chosen, they were finalised for the 2001 PALS survey and maintained for 2006 (see "How disability is determined using PALS" in Appendix 1.)

Asking the same screening questions in 2001 and 2006 is meant to ensure that the universe of people with disabilities meet the same criteria for inclusion in the survey from one year to the next. However, the way that people respond to these identical sets of questions can never be controlled; thus, it is possible that changing popular perceptions of disability, or of what constitutes disability, are reflected in the PALS data. The analysis in the next section offers a preliminary exploration of the possibility that the public understanding of disability is shifting in Canada. 12

Are perceptions of disability changing over time?

To begin thinking about the way perceptions of disability can change, consider disability as part of a continuum or spectrum. At one end of this continuum, we locate the highest calibre non-disabled persons, perhaps Olympic athletes and Nobel Prize winners; at the opposite end are people with the most severe disabilities. In between these two extremes, we find graduated levels of ability/disability involving a mix of physical and mental abilities/ disabilities.

Thus, the exact point on the continuum where a specific level of ability shifts to disability is not the same for every Canadian. So when a respondent decides to report a disability on a survey such as PALS, the answer is based on that individual's "threshold of disability" on the continuum rather than an exact "location". This also means that having a disability can be a transitory condition, since people can move into and out of a state of disability depending on their individual circumstances. For example, someone who has had a knee or hip replacement may face barriers to activities and participation during a lengthy period of recovery and rehabilitation, but upon regaining their mobility, they will no longer be considered functionally disabled.

If Canadian society has become more accepting of people with disabilities, and the stigma of reporting a disability is declining over time, we would expect the "threshold of disability" to shift toward the ability end of the continuum; that is, mild levels of disability would be reported more frequently in 2006 than in 2001. In contrast, minimal changes should occur among the more severe types of disability because perceptions of severe disability are more stable over time.

Indeed, this is what we find. Canadians were more likely in 2006 to say they were disabled than they were in 2001—16.5% versus 14.6%. Furthermore, this increase is statistically significant across gender, provinces and age groups. In 2006, 15.3% of men and 17.7% of women reported an activity limitation, disability rates that are about two percentage points higher than in 2001. As we would expect, the greatest increases occurred among those aged 65 and over, and in three of the four Atlantic Provinces where the population generally tends to be older than elsewhere in the country (Table 1).13

Furthermore, as expected, the change is most evident on the border of the ability/disability threshold. Between 2001 and 2006, the proportion of Canadians reporting a mild disability rose from 5.0% to 5.9%, or about 300,000 more people; in contrast, it remained roughly the same for those reporting a very severe disability. This suggests that people's "threshold of disability" is moving closer to the ability end of the continuum (Table 2).

However, we cannot ignore the fact that Canada's population grew older between 2001 and 2006, and that older people have a higher tendency to report activity limitations. To determine how much of the change in disability rates between 2001 and 2006 was due to population aging and how much to other factors that affect the likelihood of reporting an activity limitation, we conducted a linear decomposition analysis.¹⁴

The results show that over onethird (37%) of the increase in total disability rates was due to the age composition of the Canadian population; nevertheless, almost two-thirds (62%) was attributable to the "period effect." The period effect is the combination of societal and medical changes that occur over time and can affect the way disability is self-reported by respondents; these changes may include less stigmatization of persons with disabilities, higher expectations of personal functioning, better detection and treatment of disease or injury, better assistive technologies and devices, the way individuals interact with their environment, and so on. In other words, factors that are not related explicitly to an aging population were contributing substantively to higher rates of disability reporting in 2006 (Table 3).

When we examine the four different degrees of disability separately, though, we see a steady rise in the explanatory role of aging, and a concomitant decline in the importance of the period effect. The largest increase in disability rates was recorded for the mild category, and the decomposition analysis confirms that fully 77% of that increase is due to the period effect. In contrast, 77% of the growth in very severe disabilities is due to population aging. These results offer some support for the theory that we should see increases in the amount of self-reporting of milder disabilities (but little growth for more severe disabilities) as the stigma of disability diminishes (Chart 1).

Conclusion

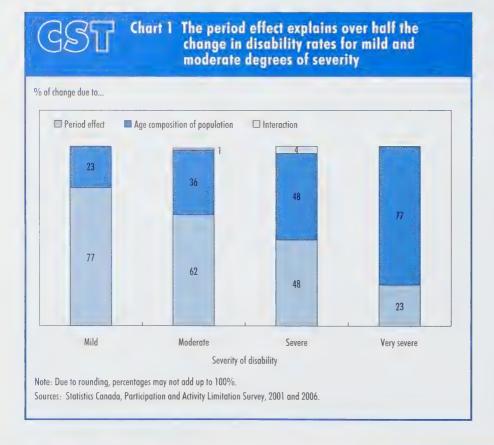
The concept of disability has been refocused over time. It has changed from being defined solely in medical

terms to being acknowledged as having a strong social dimension. Both concepts are now amalgamated in the classification system used in the ICF, as developed by the World Health Organization. Statistics Canada adopted this model for use in its 2001 and 2006 Participation and Activity Limitations Surveys.

One benefit of the definition of disability used in PALS is that researchers are able to learn whether attitudes to disability are changing in Canada over time. Certainly, a significantly higher proportion of Canadians reported being mildly disabled in 2006 than in 2001, though rates for very severe disabilities were about the same. A linear decomposition analysis of the factors contributing to this growth showed that, for milder disability rates, a smaller proportion of the change was due to population aging and a larger proportion was due to the period effect. This is consistent with the view that people may be more comfortable thinking of themselves as having a disability, and suggests there is a general lessening of the stigma associated with disability.

Andrew MacKenzie is Chief, National Population Health Survey, Health Statistics Division, and Matt Hurst and Susan Compton are senior analysts with the Social Analysis and Research Group, Social and Aboriginal Statistics Division.

- 1. Ghai, A. (2002). "Disability in the Indian context: Post-colonial perspectives." In Disability/Postmodernity: Embodying disability theory. London, Continuum: 88-100.
- 2. Hussain, Y. (2005). South Asian disabled women: negotiating identities. The Sociological Review 53(3), 522-538.
- 3. Hassiotis, A. (1996). Clinical examples of cross-cultural work in a community learning disability service. International Journal of Social Psychiatry 42(4), 318-
- 4. Landsman, G. (2003). Emplotting children's lives: developmental delay vs. disability. Social Science and Medicine 56(9), 1947-1960.



- Rao, S. (2006). Parameters of normality and cultural constructions of 'mental retardation': perspectives of Bengali families. Disability & Society 21(2), 159-178.
- 6. The term "medical model of disability" is somewhat misleading because it does not actually represent an ongoing school of thought supported by researchers or academics. Instead, this term is used to describe the historical approach and paradigm that has existed for people with disabilities throughout the 20th century.
- 7. Nagi was also among the first theorists to suggest that although impairment and disability are related, they should be considered separately. He pointed out that an impairment does not necessarily create a disability, nor do similar disabilities necessarily trace their origin to the same impairments.

- 8. Abercrombie, N., Hill, S., and Turner, B.S. (2006). The Penguin Dictionary of Sociology, 5th Edition. London, Penguin Books, p. 110.
- Blakemore, C. and Jennett, S. (2001).
 Disability. The Oxford Companion to the Body. New York, Oxford University Press
- 10. HALS was a postcensal survey because it used census "filter" questions on activity limitations and long-term disabilities to identify the target population that would be asked more detailed questions in HALS. The Participation and Activity Limitation Survey (PALS) is also a postcensal survey.
- 11. HALS was not conducted in 1996.
- 12. Many more years of PALS data using identical sets of questions are needed to provide a clear answer. It would have been preferable to start tracking changing attitudes with the 1986 HALS. However, HALS and PALS data cannot be compared
- because their definitions, concepts and methodologies differ significantly. Most importantly, the types and severity of activity limitations were expanded for PALS; new questions were designed to better identify non-physical disabilities including learning disabilities, developmental disabilities and psychological conditions. In contrast, the 1991 HALS grouped persons with these types of disabilities together into the category "Other". Also, the PALS severity scale assigns equal weight to all types of disabilities, whereas HALS gave more weight to physical than non-physical disabilities.
- 13. For detailed comparisons of 2001 and 2006 PALS data, go to http://www.statcan.gc.ca/pub/89-628-x/89-628-x2007003-eng.htm
- Firebaugh, G. (1997). Analyzing Repeated Surveys. Series: Quantitative Applications in the Social Sciences. Sage Publications Inc., (115), 27.

Table 1 Disability rates increased between 2001 and 2006, regardless of age, sex and province

	2001	2006	Difference
	perce	ntage	percentaç point
Total (age 15 and over)	14.6	16.5*	1.9
Age group			
15 to 29	4.1	5.2*	1.1
30 to 44	7.7	8.6*	0.8 E
45 to 64	16.7	18.3*	1.6 E
65 and over	40.5	43.2*	2.7 ^E
Sex			
Men	13.4	15.3*	1.9
Women	15.7	17.7*	2.0
Province			
Newfoundland	14.1	16.9*	2.8
Prince Edward Island	17.0	18.8*	1.8
Nova Scotia	20.1	22.9*	2.8
New Brunswick	16.9	19.8*	2.9
Québec	9.8	11.8*	1.9
Ontario	16.0	18.0*	2.1
Manitoba	16.9	18.4*	1.5 8
Saskatchewan	17.3	18.7*	1.4 ^E
Alberta	14.8	15.9*	1.1 E
British Columbia	16.3	18.3*	2.1

 $^{^{}st}$ significantly different from 2001 at p < 0.05

Note: The population in 2006 excludes three groups so that results can be compared to 2001 figures. The groups are: Aboriginal communities; persons in non-institutional collective dwellings (e.g. seniors residences); and persons living in Yukon Territory, Northwest Territories and Nunavut.

Sources: Statistics Canada, Participation and Activity Limitation Survey, 2001 and 2006.

Table 2 Increases in disability rates are highest for those with a mild disability

	Severity of disability									
	All le	All levels		Mild Moderate		erate	Severe		Very severe	
	2001	2006	2001	2006	2001	2006	2001	2006	2001	2006
					perce	ntage				
Total (age 15 and over)	14.6	16.5*	5.0	5.9*	3.6	4.1*	3.9	4.4*	2.0	2.2
Age group										
15 to 29	4.1	5.2*	1.8	2.4*	1.0	1.3*	0.9	1.0	0.4	0.5*
30 to 44	7.7	8.6*	2.6	3.0*	2.0	2.3*	2.1	2.3	1.0	1.0
45 to 64	16.7	18.3*	5.1	6.0*	4.1	4.6	4.9	5.1	2.6	2.6
65 and over	40.5	43.2*	14.4	15.7	10.1	10.3	10.3	11.2	5.6	6.0

significantly different from 2001 at p < 0.05

Note: The population in 2006 excludes three groups so that results can be compared to 2001 figures. The groups are: Aboriginal communities; persons in non-institutional collective dwellings (e.g. seniors residences); and persons living in Yukon Territory, Northwest Territories and Nunavut.

Sources: Statistics Canada, Participation and Activity Limitation Survey, 2001 and 2006.

Table 3 Change in disability rates is attributable to the period effect and the aging population from 2001 to 2006

Severity of disability	Total change 2001 to 2006	=	Period effect (b)	+	Age composition of population	+	Interaction (d)
Severity of disability	(a)		(0)		(c)		(u)
			perc	entage	points		
Overall	1.95*		1.21*		0.71*		0.02
% of total	100		62		37		1
Severity of disability							
Mild	0.89*		0.68*		0.20*		0.00
% of total	100		77		23		0
Moderate	0.45*		0.28*		0.16*		0.01
% of total	100		62		36		1
Severe	0.43*		0.21		0.21*		0.02
% of total	100		48		48		4
Very Severe	0.17		0.04		0.13*		0.00
% of total	100		23		77		0

significantly different from 0 at p < 0.05

Note: Due to rounding, percentages may not add up to 100%.

Sources: Statistics Canada, Participation and Activity Limitation Survey, 2001 and 2006.

GST Appendix 1 How disability is determined using PALS

In order for PALS to reach its target population, all persons were included in the survey frame if they replied "Yes" to either of the two disability filter questions on the 2001 and 2006 Census of Population questionnaires.

The Census disability filter questions are as follows:

1. Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?

Yes, sometimes

Yes, often

No

2. Does a physical condition or mental condition or health problem reduce the amount or the kind of activity you can do

a) at home?

Yes, sometimes

Yes, often

No

b) at work or at school?

Yes, sometimes

Yes, often

No

c) in other activities, for example, transportation or leisure?

Yes, sometimes

Yes, often

No

The disability filter questions were repeated during the PALS interview and followed by a series of PALS screening questions to determine the nature of their disability. If respondents did not report a limitation to either the disability filter questions OR the PALS screening questions, they were dropped from the sample. (They could report a disability to either the filters or the screeners and still stay in PALS.) It is not uncommon for respondents to report a limitation on Census day but not to PALS because of short-term conditions such as recovering from surgery, broken bones and so on.

Below is an example of the PALS disability filter questions. (This particular series is designed to identify respondents with learning disabilities.) The PALS filter questions are used to identify all 10 major disability categories; that is, hearing, seeing, communication, mobility, agility, pain, learning, memory, developmental and emotional disabilities.

Q01 Do you think you have a condition that makes it difficult in general for you to learn? Such conditions include attention problems, hyperactivity, dyslexia and others.

Yes

No

Don't know

Q02 Has a teacher, doctor or other health professional ever said that you had a learning disability?

Yes

No

Don't know

Q03 Does this condition reduce the amount or the kind of activities you can do?

Yes, sometimes

Yes, often or always

No

Don't know

GST Appendix 1 How disability is determined using PALS (continued)

Q04	How many activities does this condition usually prevent you from doing at home?
	None A few
	Many
	Most
	Don't know
Q05	How many activities does this condition usually prevent you from doing at work?
	None
	A few
	Many
	Most
	Don't know
006	How many activities does this condition usually prevent you from doing at school?
	None
	A few
	Many
	Most
	Don't know
007	How many activities does this condition usually prevent you from doing in other areas, such as transportation or
	leisure?
	None
	A few
	Many
	Most
	Don't know

no. 89-628-X. Ottawa: Minister of Industry.

Living with disability series

Social participation of children with disabilities

by Krista Kowalchuk and Susan Crompton

aving friends, participating in group activities and joining clubs are ways in which children become engaged with their society, and these activities represent an essential aspect of their social and personal development. Being engaged in extracurricular activities is also related to a number of other direct benefits for a child, including better academic results and reduced emotional and behavioural problems.² However, participating in these activities is not always easy for some children, especially those who have a disability.3

Child development is a complicated process that becomes more complex when a child has a disability. In all aspects of their lives, children with disabilities may need help in order to ensure as much equality and accessibility to daily activities as possible. While we know a lot about education, assistive aids and adaptive technology, medical treatments, and transportation, researchers have not devoted as much attention to issues pertaining to social participation.⁴

Social participation—which we will also call social engagement —refers to relationships with family members, peers, community members, local institutions and, at the broadest level, with society. Earlier research has found that children with disabilities are less involved than their non-disabled counterparts, in that they participate less in social

activities.⁵ As public awareness of the importance of inclusion grows, children with disabilities are increasingly accommodated in extracurricular activities.

This article will identify the factors that influence the social engagement of children with disabilities aged 5 to 14 who live with their parents. The focus is on participation in social activities outside the family home and outside regular school hours. Social engagement is measured by participation in organized sports; in organized non-sport activities (lessons, clubs and community groups); and in virtual networks with their peers (phone, chatrooms, email). Following the literature, the factors we examine include the effect of the child's condition on their day-to-day functioning, the child's own social competencies, family functioning, parental support, and environmental barriers.

A little about the study population

In 2006, the Participation and Activity Limitation Survey (PALS) identified about 125,000 children aged 5 to 14 living with their parents who had disabilities. Almost two-thirds of these children were boys (65%); over half of them were "tweens" between 10 and 14 years old (57%); over four in ten children (44%) had a degree of disability that was classified as severe or very severe.

The types of disabilities these children had, as reported by their parents, covered a wide range of physical as well as non-physical limitations, with the most common types being learning disabilities (71%), chronic physical limitations like diabetes, asthma or heart disease (62%), speech conditions (46%), and chronic non-physical limitations such as autism or attention deficit disorder (42%).6

Rather than focus on specific disabilities, this article will address the three major categories of disability: physical disabilities only (19% of children in the study population), non-physical disabilities only (24%), and both physical and non-physical disabilities (57%) (Chart 1).

A child's participation in activities outside the regular structure of home and school is a key measure of their social engagement. Children can be engaged socially and meet new friends through a variety of activities. In this study, we examine children's engagement using three separate indicators of social participation: organized sports and physical activities ("sports"); lessons, clubs and community groups ("non-sport activities"); and interaction with peers online via e-mail, in newsgroups or chatrooms, and on the telephone ("networks") (see "What you should know about this study" for complete information).

(9817 What you should know about this study

This article draws on the child component of the 2006 Participation and Activity Limitation Survey. The target population comprises 3,100 respondents, representing just under 125,000 children aged 5 to 14 with disabilities who live with their parents (lone-parent or two-parent families). Data were collected from the person most knowledgeable about the child, generally a parent. Strictly speaking, because the child's parent/guardian answered the survey on the child's behalf, all statistics actually refer to those children with disabilities whose parent responded to the questionnaire. For the sake of brevity, however, this article will refer to "children."

Definitions of terms

Children with disabilities/activity limitations: Children aged 5 to 14 living with their parent(s), whose respondent parent reported that they had difficulties with daily living activities, or that a physical or mental condition or health problem reduced the kind or amount of activities the child could do. The answers to the disability questions represent the respondent's perception of the situation and are therefore

Physical disabilities: Hearing; seeing; mobility; agility; chronic physical conditions, including asthma and allergies, heart condition or disease, kidney disease, cancer, diabetes, epilepsy, cerebral palsy, spina bifida, muscular dystrophy, migraines, arthritis or rheumatism, paralysis of any sort, missing limbs or digits, complex medical care, other not specified.

Non-physical disabilities: Speech/communication; learning; developmental; emotional/psychological; chronic non-physical conditions, including autism, fetal alcohol syndrome, ADD or ADHD, and Down syndrome.

Severity of disability: PALS constructed a scale measuring the overall severity of disability according to the intensity and frequency of the activity limitations reported by respondents. The disability severity scale is divided into four levels: mild, moderate, severe and very severe.

Significant difference: Before concluding that two estimates are different, one must determine if the difference between them is statistically significant and is not due to random sampling error. One way to determine this is by creating confidence intervals for the estimates using each estimate's coefficient of variance. If their confidence intervals do not

overlap, then there is 95% certainty that the estimates are significantly different.

Social participation

In a recent study, Canadian researchers argued that it is important to remember that participation in many activities is not necessarily a better measure of social engagement than participation in fewer activities. They point out that a child may take part in one activity very frequently, whereas another child may be involved in a variety of activities but do so infrequently.

The three social participation indices developed for this study respect this argument. Each index includes two to three different types of activities and children were classified as participants if they had taken part in any of them in the 12 months preceding the survey, regardless of frequency. (Frequency ranges from every day to less than once a month.)

Organized sports and physical activity/sports: Takes part in organized sports with coach or instructor; takes part in other physical activities with coach or instructor, e.g. dance, gymnastics.

Lessons, clubs and community groups/non-sport activities: Takes lessons or instruction in non-sport activities, e.g. music or art; takes part in activities of clubs or community groups, eg. Scouts, church groups.

Virtual peer network/network: Takes part in Internet chatrooms or newsgroups; uses e-mail to keep in touch with friends; talks on the phone with friends.

The models

Previous research suggests that a number of factors can influence the social engagement of a child with a disability. In order to isolate the individual factors that are associated with social participation, logistic regression models were developed for each of the social activities. These models allowed us to estimate the odds that a child with a given characteristic was a participant compared to a non-participant in an activity, while removing the effect of other confounding factors. The odds ratios were estimated through a weighted regression that used PALS survey weights, with variance estimation done through survey bootstrapping. Statistical significance was calculated at p < 0.05.

CST What you should know about this study (continued)

In the models, the factors examined are divided into the following categories:

Child's condition: measured by type of disability and severity of the disability.

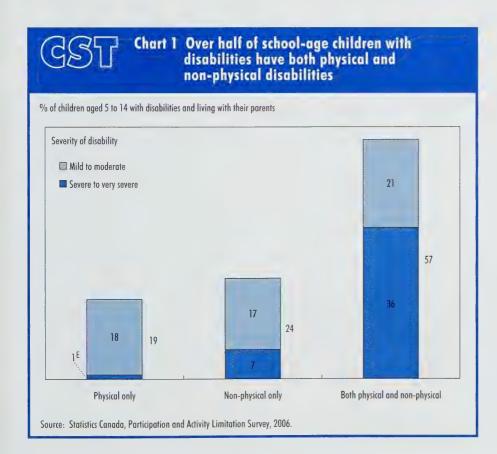
Effect of child's condition on functioning: measured by whether child uses help for everyday activities; child's condition creates a disadvantage at school; child's condition creates a disadvantage in areas such as transportation and leisure activities; the parent feels that the school accommodates their child's condition or health problem.

Child's social competencies: measured by whether the child gets along with other children (excluding siblings); child looks forward to going to school; and age and sex (since children generally exhibit different social capacities depending on their stage of development).

Family support: measured by parental involvement in child's classroom (contact with teacher; attended events like plays or science fairs that child participated in; helped with class trips); parental involvement in child's school (helped elsewhere in school, e.g. library, computer room; attended parent council meetings; fundraising; other); household income; family's place of residence; family type.

Environmental barriers: measured by existence of societal barriers, which includes programs or services not available, facilities not accessible, inadequate transportation, too expensive; existence of personal barriers, which includes child's condition limits participation, child needs someone's help to participate, do not have specialized aids or equipment necessary, child or family is too busy.

1. Law, M., King, G., King, S., Kertoy, M., Hurley, P., Rosenbaum, P., Young, N., Hanna, S., and Petrenchik, T. (2006). Patterns and predictors of recreational and leisure participation for children with physical disabilities. CanChild Centre for Childhood Disability Research.

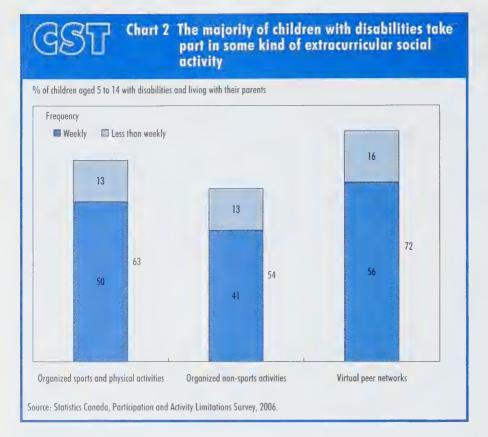


Just under two-thirds (63%) of 5- to 14-year-old children with disabilities were engaged in some kind of organized sport or other physical activity, such as playing soccer, tae kwon do, swimming or dancing. Most of these children were doing something at least once a week⁷ (Chart 2).

Over half (54%) of children with disabilities took lessons in some type of non-sport interest, or belonged to clubs or community groups; a large majority of participants did something every week. And almost three-quarters of children with disabilities (72%) were linked to networks with their peers, with three-quarters of participants online or on the phone with friends at least once a week.

Type of disability associated with non-sport activities, severity with peer networks

To identify children with disabilities who are more likely to participate in social activities, the first factors to



examine are the type and severity of the child's disability. If children with limitations are unable to join in particular events or activities, they may be excluded from engaging socially with their peers and others. And though it is often thought that children with physical disabilities are excluded more often than those with non-physical limitations, other obstacles can act as barriers for children with cognitive or developmental disabilities; for instance, if a child's disability causes him to act impulsively or impairs her communications skills, they are often not accepted into the peer group.8

The PALS data show that a child with both physical and non-physical disabilities is significantly less likely to take part in organized sports. Only 59 % of these children were participants, compared with 70 % of children with physical limitations only (Table 1).

Similarly, children with both physical and non-physical limitations

were less likely to be engaged in nonsport activities like taking lessons or belonging to clubs or community groups, situations which may demand more sophisticated social skills. They were also less likely to have virtual networks with their peers (Table 1).

The severity of their limitation is related to children's participation in two of three social activities. Only 43% of kids with a very severe degree of disability were connected to peer networks, compared with 86% of children with mild limitations. The gap was smaller but still statistically significant for organized sports, at 45% versus 70%.

It is useful to know whether the type of disability or the degree of its severity has a stronger association with a child's probability of being socially engaged. To isolate the effects of individual factors, logistic regression models were developed to estimate the odds that a child with a given characteristic was a participant rather than a non-participant in a given

social activity. (See "What you should know about this study" for more information about the regression models.)

After controlling for the effects of other factors (including severity of disability), the model results show that the type of disability was not associated with participation in organized sports or in peer networks. But for non-sport activities, children with a non-physical disability had significantly lower odds of being involved than those with physical disabilities only (Table 2).

The severity of the child's condition is not associated with their odds of participation in sports or non-sports activities, once other factors (including type of disability) are controlled for. The exception is peer networks: compared to children with a mild degree of disability, those with a very severe disability had less than half the odds of being online or on the phone with friends and other peers.⁹

Child's day-to-day functioning related to involvement in sports and peer networks

Some conditions create a specific disadvantage for a child. For example, some children may have to receive help with everyday activities; for others, their condition may often cause difficulties accessing transportation or leisure activities, or it may impose certain restrictions at school.

According to PALS, children who have such disadvantages were just as likely as others to participate in non-sport activities, but they were significantly less likely to be involved in organized sports and peer e-networks (Table 1). However, after controlling for other factors in the model, the effect of the child's condition on day-to-day functioning was no longer associated with participation in organized sports.

Results of the model show that children who received help in order to do daily activities had significantly lower odds of being involved in virtual

Table 1 Children with disabilities aged 5 to 14, living with parents, participating in social activities, 2006

	Child part	icipates in social activi	ties
	Organized sports and physical activities	Organized non- sports activities	Virtual peer networ
		percentage	
Children with disability (Total)	63	54	72
Child's condition			
Type of disability			
Physical only †	70	64	86
Non-physical only	69	53	76
Both physical and non-physical	59*	52*	66*
Severity of disability	3,	32	00
Mild †	70	57	86
Moderate	67	55	80
Severe	65	54	71*
Very severe	45*	49	43*
Effect of child's condition on functioning	45	47	43
Child's condition causes disadvantages at school	/ 7	F /	7.0
None/a few †	67	56	78
Often/always	58*	52	63*
Child's condition causes disadvantages in transportation or leisure			
None/a few †	67	56	77
Often/always	49*	47	52*
Child receives help with everyday activities because of condition			
No †	66	54	81
Yes	54*	53	44*
Overall, the school accommodates the child's condition			
Mainly agree †	63	54	71
Strongly agree	65	56	77
Child's social competencies			
Child looks forward to going to school			
Sometimes/not often †	61	54	76
Most of the time	65	55	72
Child gets along all right with friends and classmates (not siblings)			
Usually †	61	52	66
Very well	65	56	78*
Age group			
Age 5 to 9 years old †	68	53	60
Age 10 to 14 years old	60	55	82*
Sex		33	02
Boy †	63	51	69
Girl	64	61*	80*
Family support	04	01	00
Parent has high level of involvement in child's classroom activities			
	41	42	40
No †	69*	42 57*	68
Yes	67	2/	74
Parent has high level of involvement in school-level activities		40	70
No †	60	49	73
Yes	69*	62*	72
Family structure			
Lone-parent family †	59	46	76
Two-parent family	65	57*	71

Table 1 Children with disabilities aged 5 to 14, living with parents, participating in social activities, 2006 (continued)

	Child parti	Child participates in social activities			
	Organized sports and physical activities	Organized non- sports activities	Virtual peer network		
	percentage				
Family income					
Under \$30,000 †	54	48	70		
\$30,000 to \$59,999	54	50	73		
\$60,000 to \$89,999	67*	57	74		
\$90,000 or more	76*	61	72		
Place of residence					
Rural Conoda †	56	57	78		
Urban Canada	65*	54	71		
nvironmental barriers					
Societal barriers to participation					
No †	68	55	76		
Yes	46*	52	63*		
Personal barriers to participation					
No †	71	56	79		
Yes	49*	50	60*		

[†] reference group

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

peer networks (Table 2). However, attending a school that did a good job of accommodating their condition did significantly increase the odds of being "connected," after all other factors were controlled for.

In general, children's social competencies are not associated with social engagement

Much of children's social interaction takes place in the classroom; consequently, that is where most children learn how to behave toward one another and to develop and maintain social relationships. Thus, it seems reasonable to measure children's social competencies by how well they interact with others and whether they enjoy going to school (where they will see many of their friends). Since a child's age and sex are generally related to social confidence, we will examine these characteristics first.

The child's age and sex were not related to higher levels of participation in organized sports. But girls were more likely than boys to be involved in non-sport activities and in virtual peer groups. Also, "connectedness" was much higher for 10- to 14-year-olds (82%) than 5- to 9-year-olds (60%). These relationships remained significant after controlling for other factors (Table 1).¹¹

Children with disabilities who looked forward to going to school most of the time were no more or less likely to participate in all three extracurricular activities than those who were not so keen to be in class. Similarly, children who got along very well with other kids were no more or less likely to be involved than those who did not get on so easily. The exception is in virtual peer networks: children who related very well to others were more likely to be active, at 78% versus 66% (Table 1).

But once other factors are taken into account, getting along with other children is no longer significant for maintaining e-networks, although it is associated with lower odds of participating in sports. In contrast, children who enjoy going to school had significantly lower odds of being "connected" to peers (Table 2).

Family support is strongly related to participation in organized sports and non-sport activities

The psychological support that parents provide to their children is an important factor in predicting how socially engaged those children will be. By encouraging their child to pursue his interests, parents can give a child confidence and play a key role in developing their level of engagement. Still, it is important to point out that too much parental involvement might be detrimental: a 2006 report notes that parents of

statistically significant difference from reference group at p < 0.05

disabled children tend to interfere during play with other children and may create conflict within the friendship.¹³

PALS data show that children whose parents had a high level of classroom commitment were more likely to participate in both organized sports and non-sport activities (classroom involvement includes having contact with the child's teacher, attending events like plays or science fairs that the child participated in, and helping with class trips). The parent's degree of commitment remained significant after other factors in the models were controlled for: children with a parent who was active in the classroom had three times higher odds of taking part in sports, and almost two times higher odds of being involved in nonsport activities (Table 2).

Having a parent who volunteered at the school level was also associated with higher social participation, although the relationship was not as strong (this type of involvement includes helping elsewhere in school such as in the library or computer room, attending parent council meetings, fundraising, and other activities). Children whose parents were volunteers at the school level had significantly higher odds of participating in organized sports and in non-sport activities.

In contrast, parental classroom and school-level support was not significantly associated with a child's virtual engagement with their peer network.

Family income and urban residence are strongly linked to sports participation

Living in a two-parent family may provide instrumental support to a child with disabilities. Two parents may find it easier to facilitate social engagement, for example, by driving the child to events, providing needed assistance to the child when she joins in activities, and so on. But marital status was not significantly associated with social participation, once other factors were controlled for.

In contrast, family income is another type of instrumental support and it is strongly related to engagement in organized sports. When family income was over \$90,000, children were much more likely to participate in organized sports than if it was under \$30,000 (76% compared to 54%) (Table 1). Income remained strongly related to sports participation, even after other factors were taken into account: the odds of participating were about two to three times higher for children with disabilities living in families with incomes over \$60,000. On the other hand, a family's income had no association with the odds that their child was engaged in non-sport activities or virtual peer networks (Table 2).

Table 2 Odds ratios of children with disabilities aged 5 to 14, living with parents, participating in social activities, 2006

Odds ratios of being participant versus non-participant Organized sports and Organized non-Virtual physical activities sport activities peer network odds ratios Child's condition Child's type of disability Physical only † 1.0 1.0 09 0.6* 0.6 Non-physical only Both physical and non-physical 0.7 0.6* 0.6 Severity of disability 1.0 Mild † 1.0 1.0 Moderate 0.9 1.0 0.9 1.0 1.0 0.8 Severe 1.2 0.4* 0.7 Very severe Effect of child's condition on functioning Child's condition causes disadvantages at school 1.0 1.0 1.0 None/a few t 0.8 Often/always 0.9 1.0 Child's condition causes disadvantages in transportation or leisure 1.0 1.0 1.0 None/a few t 0.8 Often/always 0.9 0.7 Child receives help with everyday activities because of condition 1.0 1.0 1.0 No t 0.4* 1.1 13 Overall, the school accommodates the child's condition 1.0 1.0 1.0 Mainly agree † 1.1 1.0 1.5* Strongly agree

Table 2 Odds ratios of children with disabilities aged 5 to 14, living with parents, participating in social activities, 2006 (continued)

	Odds ratios of being participant versus non-participant			
	Organized sports and physical activities	Organized non- sport activities	Virtual peer network	
		odds ratios		
Child's social competencies				
Child looks forward to going to school				
Sometimes/not often †	1.0	1.0	1.0	
Most of the time	1.1	0.8	0.6*	
Child gets along all right with friends and classmates (not siblings)				
Usually †	1.0	1.0	1.0	
Very well	0.7*	0.9	1.3	
Age group				
Age 5 to 9 years old †	1.0	1.0	1.0	
Age 10 to 14 years old	0.7*	1.2	3.3*	
Sex	· · ·			
Boy †	10	1.0	1.0	
Girl	1.0	1.6*	1.9*	
Family support	1.0	1.0	1.7	
Parent has high level of involvement in child's classroom activities				
No †	1.0	1.0	1.0	
Yes	3.1*	1.7*	1.4	
Parent has high level of involvement in school-level activities	5.1	1.7	1.4	
	1.0	1.0	1.0	
No †	1.0	1.6*	1.0	
Yes	1.4	1.0	1.1	
Family structure	1.0	1.0	1.0	
Lone-parent family †	1.0	1.0	1.0	
Two-parent family	0.7	1.3	0.7	
Family income				
Under \$30,000 †	1.0	1.0	1.0	
\$30,000 to \$59,999	1.0	0.9	1.0	
\$60,000 to \$89,999	1.8*	1.2	1.2	
\$90,000 or more	2.8*	1.3	1.1	
Place of residence				
Rural Canada †	1.0	1.0	1.0	
Urban Canada	1.7*	1.0	0.8	
Environmental barriers				
Societal barriers to participation				
No †	1.0	1.0	1.0	
Yes	0.6*	1.1	1.4	
Personal barriers to participation				
No †	1.0	1.0	1.0	
Yes	0.5*	0.8	0.8	

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

statistically significant difference from reference group at $\rm p < 0.05$

Another element of instrumental support, especially for children with disabilities, can be the family's proximity to services. Children with disabilities who lived in urban areas had significantly higher odds of taking part in organized sports than those who lived in rural areas. This finding may reflect the greater availability, in urban centres, of programs and facilities that can accommodate children with disabilities. In contrast. the family's place of residence was not significant for either lessons, clubs and groups, or for maintaining e-networks.

Environmental barriers associated with lower participation in organized sports

Barriers in the environment can play a key role in the level of social engagement available to a child with disabilities. For example, if an activity such as baseball or hockey is not adapted to accommodate a child, he may be prevented from participating. Similarly, if a child is without adequate transportation, she is often unable to attend events or activities. 14 And while children with physical limitations may lose opportunities to take part in physical activities, children with non-physical disabilities may be excluded from activities due to cognitive conditions that cause inappropriate interaction with peers. 15

We identified two categories of environmental barriers: societal barriers that include programs or facilities not being available locally, transportation difficulties and high costs; and personal barriers directly related to the individual, which include the child needing special equipment or someone else's help to join an activity, and limitations caused by the child's condition.

As expected, PALS shows that children with disabilities were less likely to participate in organized sports if they encountered environmental barriers. Fewer than half of children who reported societal and personal

barriers took part, compared with over two-thirds of other children with disabilities.

After controlling for other factors, environmental barriers remained significant only for sports participation. That is, kids who faced both societal and personal barriers had lower odds of participating in organized sports.

Children were also less likely to maintain virtual peer networks if they faced environmental barriers to going online or talking on the phone; however, these factors did not remain significant once other variables in the model were taken into account.

Summary

Greater efforts are being made to accommodate children with disabilities in many extracurricular activities such as organized sports, groups and clubs. But data from the 2006 Participation and Activity Limitation Survey show that, depending on the type of activity, as many as one-quarter to one-half of kids with disabilities never participate.

A child's participation in activities outside the home and school is a key measure of his or her level of social engagement. This study found that about two-thirds of children aged 5 to 14 with disabilities and living with their parents took part in organized sports and physical activities; just over half were involved in nonsport organized activities like taking lessons, joining clubs and community groups; and a little less than three-quarters were engaged in virtual networks with their peers online and on the phone.

Regression models suggest that the child's type of disability was significantly associated only with participation in non-sport activities; similarly, the severity of their limitation was related only to maintaining virtual networks with peers. Parental support at school significantly increased a child's odds of participating in both organized sports and in non-sport activities, but not in virtual peer networks.

Other factors associated with the odds that a child would take part in social activities tended to vary with the activity. Having a higher family income, living in an urban area and getting along well with other children were related to sports participation. Environmental barriers and being between 10 and 14 years old were negatively associated with sports participation. Being a girl was positively associated with taking part in organized non-sport activities.

Possibly because virtual peer networks are not mediated by adult instructors and coaches, the factors associated with participation in this activity are somewhat different. Children had higher odds of being engaged in a peer network if they were a girl, 10 to 14 years old, and attended a school that does a good job of accommodating their condition.

GST

Krista Kowalchuk is an analyst with Participation and Activity Limitation Survey, Health Statistics Division, and **Susan Crompton** is a senior analyst with Canadian Social Trends.

- Law, M., King, G., King, S., Kertoy, M., Hurley, P., Rosenbaum, P., Young, N., Hanna, S., and Petrenchik, T. (2006). Patterns and predictors of recreational and leisure participation for children with physical disabilities. CanChild Centre for Childhood Disability Research.
- Guèvremont, A., Findlay, L., and Kohen. D. (2008). Organized extracurricular activities of children and youth. Health Reports 19(3), 65-69. Statistics Canada Catalogue no. 82-003-XWE.
- King, G., Law, M., King, S., Rosenbaum, P., Kertoy, M., and Young, N. (1999). The participation of children with disabilities. CanChild Centre for Childhood Disability Research.
- 4. Hanvey, L. (2003). Social inclusion research in Canada: Children and youth. Ottawa: Canadian Council on Social Development.

- 5. Hanvey. (2003). Guèvremont et al. (2008). A 2008 Statistics Canada report showed that 86% of children and youth aged 6 to 17 participated at least once a month in at least one extracurricular activity, with organized sports being more common than non-sports activities such as lessons (music, art, drama, etc.) and membership in clubs or community groups.
- 6. Statistics Canada. (2007, December 3). Participation and Activity Limitation Survey. The Daily. Statistics Canada Catalogue no. 11-001-XWE. Almost three-quarters of all children with disabilities have been diagnosed with more than one disability.
- Of course, many children were active in unorganized physical activities (i.e. did not involve a coach, instructor or supervisor) which are not included in this study's definition of sports. Two-thirds (66%) of disabled children aged 5 to 14 who lived with their parents took part in these unorganized activities, and of these children, 74% participated at least once a week.

- 8. Bortoli, A., and Brown, M. P. (2002). The significance of attention during social engagement. Document presented at the Australian Association for Research in Education Conference, Brisbane,
- Law, M., Finkelman, S., Hurley, P., Rosenbaum, P., King, S., King, G., and Hanna, S. (2004). Participation of children with physical disabilities: relationships with diagnosis, physical function, and demographic variables. Scandinavian Journal of Occupational Therapy, 11(4), 156-162. In a study of children with physical disabilities, Canadian researchers found that the diagnostic category of the child's condition was not a significant influence on participation in daily activities, once adjusted for age, sex and physical function, and suggest that other personal, family and environmental characteristics are important predictors of participation.
- 10. Readers should recall that these responses are reported by the parent and not the

- 11. Bortoli and Brown (2002). Research has shown that the social networks of nondisabled children are made up primarily of friends of the same sex, while those of children with a disability (whether they are boys or girls) are composed mainly of female friends. One explanation is that girls generally have a higher likelihood than boys of being friends with a child who has a disability.
- 12. King, G., et al. (1999).
- 13. Thomas, P., Roller, S., Scharnhorst, A., Cunningham, S., and Warschausky, S. (2006). Study explores how children with disabilities make friends: How can parents and school personnel help? Focus on Results, (March). Michigan Department of Education.
- 14. Hanvey, L. (2002). Children with Disabilities and Their Families in Canada, (November). Discussion Paper commissioned by the National Children's Alliance for the First National Roundtable on Children with Disabilities.
- 15. Thomas et al. (2006).

Looking for Aboriginal statistics online?

Aboriginal data

are offered in a series of online links that lead you to information about Aboriginal Peoples published by Statistics Canada.



Find the information you need now.

Let www.statcan.gc.ca guide you to Aboriginal data. On the Statistics Canada home Web page you'll find information on:

- → Aboriginal languages
- -- Childcare
- Education
- Health and well-being
- → Housing
- → Income
- Labour
- → Aboriginal Children's Survey (ACS)
- Aboriginal Peoples Survey (APS)
- And much more....

Put the data to work.

Link to a host of online products, documents and data. Download data at a push of a button.

It's easy! Bookmark it!

Visit our Web site at www.statcan.gc.ca and click on any of the links located on the left hand side of the Web site home page and let your mouse lead the way!

First Nations, Métis and Inuit data at your fingertips! www.statcan.gc.ca

Here are some of the handy links you'll find on the Statistics Canada Web site home page:

- 1. The Daily
- 2. By subject
 - Aboriginal Peoples
- 3. Census
 - Release Topics
 - · Aboriginal Peoples
 - Data Products
 - Highlight tables (key indicators by topic and geography)
 - Topic based tabulations
 - 2006 Community profiles
 - · Aboriginal population profile
 - Census tract profiles (neighbourhood statistics)
 - Post-Censal data products
 - 2006 Profile of Aboriginal Children, Youth and Adults
- 4. Anaytical Studies (Aboriginal Survey results)
- 5. Definitions, Data Sources and Methods
 - Questionnaires
 - List by subject
 - Alphabetical list
 Aboriginal Children's Survey (ACS),
 Aboriginal Peoples Survey (APS)
 and Census



General enquiries:

E-mail: sasd-dssea@statcan.gc.ca Toll-free number: 1-800-263 1136

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of *Canadian Social Trends* explores the social realities that we are dealing with **now**.

... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



Take advantage of this opportunity today!

Subscribe now by using any one of the following methods: Call toll-free 1-800-267-6677 Fax toll-free 1-877-287-4369

E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the free online version of Canadian Social Trends.

Looking for Aboriginal statistics online?

Aboriginal data

are offered in a series of online links that lead you to information about Aboriginal Peoples published by Statistics Canada.



Find the information you need now.

Let <u>www.statcan.gc.ca</u> guide you to Aboriginal data. On the Statistics Canada home Web page you'll find information on:

- → Aboriginal languages
- -- Childcare
- → Education
- Health and well-being
- Housing
- → Income
- Labour
- Aboriginal Children's Survey (ACS)
- → Aboriginal Peoples Survey (APS)
- → And much more....

Put the data to work.

Link to a host of online products, documents and data. Download data at a push of a button.

It's easy! Bookmark it!

Visit our Web site at www.statcan.gc.ca and click on any of the links located on the left hand side of the Web site home page and let your mouse lead the way!

First Nations, Métis and Inuit data at your fingertips! www.statcan.gc.ca

Here are some of the handy links you'll find on the Statistics Canada Web site home page:

- 1. The Daily
- 2. By subject
 - Aboriginal Peoples
- 3. Census
 - Release Topics
 - Aboriginal Peoples
 - Data Products
 - Highlight tables (key indicators by topic and geography)
 - Topic based tabulations
 - 2006 Community profiles
 - · Aboriginal population profile
 - Census tract profiles (neighbourhood statistics)
 - Post-Censal data products
 - 2006 Profile of Aboriginal Children, Youth and Adults
- 4. Anaytical Studies (Aboriginal Survey results)
- 5. Definitions, Data Sources and Methods
 - Questionnaires
 - · List by subject
 - Alphabetical list
 Aboriginal Children's Survey (ACS),
 Aboriginal Peoples Survey (APS)
 and Census



General enquiries:

E-mail: sasd-dssea@statcan.gc.ca Toll-free number: 1-800-263-1136

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of Canadian Social Trends explores the social realities that we are dealing with **now**.

... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



Take advantage of this opportunity today!

Subscribe now by using any one of the following methods: Call toll-free 1-800-267-6677 Fax toll-free 1-877-287-4369 E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the free online version of Canadian Social Trends.

CAND AND AND Summor No. 80 COLONIA MARCHARA SOLONIA MARCH

Features

Long distance caregiving Retail services in French Women:

Living with disabilities
Avoiding victimization
Evolution of gender roles
Socioeconomic profile
Métis culture

Couples in mixed unions

\$24 Canada • Catalogue no.11-008 Summer 2010 • No. 89

11-008



Statistics Canada Statistique Canada Canadä





Editorial office

E-mail: cstsc@statcan.gc.ca

Fax: 613-951-0387 Write: Editor-in-Chief,

Canadian Social Trends Statistics Canada

7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

For service to subscribers

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Write: Statistics Canada, Finance,

6-H R.H. Coats Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

How to order Statistics Canada publications

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Online: http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE

Need more information about Statistics Canada products?

E-mail: infostats@statcan.gc.ca

Phone: 1-800-263-1136
Online: www.statcan.gc.ca
TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "The agency" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.





Editor-in-Chief

Editor-in-Chief Cara Williams

Senior English Editors Nikki Burke, Valerie Peters

Senior French Editor Marie-Paule Robert

Production Manager and Art Direction

Monique Poirier

Creative Services

Dissemination Division, Statistics Canada

Publishing Specialists

Lyne Bélanger, Chantal Chalifoux and the Publication Production Services

Marketing

Jeff Jodoin, Alex Solis

Associate Editors

Warren Clark, Susan Crompton, Matt Hurst, Leslie-Anne Keown, Derrick Thomas, Martin Turcotte

Review Committee

Jane Badets, Rosemary Bender, Geoff Bowlby, Yvan Clermont, Johanne Denis, Louise Marmen, Karen Mihorean, Jillian Oderkirk, Georgia Roberts

Canadian Social Trends

June 2010

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2010

All rights reserved. This product cannot be reproduced and/or transmitted to any person or organization outside of the licensee's organization. Reasonable rights of use of the content of this product are granted solely for personal, corporate or public policy research, or for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from this product. These materials are solely for non-commercial purposes. In such cases, the source of the data must be acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, users shall seek prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Indexed in the Academic ASAP, Academic Search Elite, Canadian Periodical Index, Canadian Serials, Expanded Academic ASAP, PAIS International, Periodical Abstracts, Periodical Abstracts Research II, ProQuest 5000, Proquest Research Library and available on-line in the Canadian Business and Current Affairs Database.

ISSN 0831-5698 (Print) ISSN 1481-1634 (Electronic)



Features



3 Caring for a parent who lives far away: The consequences

by Mireille Vézina and Martin Turcotte

- 14 Retail and customer service in French
 by Martin Turcotte
- 26 Living with disabilities series
 Life satisfaction of working-age women
 with disabilities
- 33 Precautions taken to avoid victimization: A gender perspective by Leslie-Anne Keown
- 40 The Census and the evolution of gender roles in early 20th century Canada

47 Social fact sheet

by Derrick Thomas

by Susan Crompton

- 56 Economic fact sheet
- 63 An exploration of cultural activities of Métis in Canada

by Mohan B. Kumar and Teresa Janz

70 A portrait of couples in mixed unions by Anne Milan, Hélène Maheux and Tina Chui

Cover

Photography used by permission; © 2010 Carol Noël all rights reserved.

Standard symbols for Statistics Canada

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- E use with caution
- F too unreliable to be published

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48 - 1984.

Caring for a parent who lives far away: The consequences

by Mireille Vézina and Martin Turcotte

amily members are generally the main source of informal assistance when a relative has a chronic health problem. When those requiring care are elderly, if they have children who are available it is usually these children who come to their aid. Seniors who require support but do not have a partner or whose partner can no longer provide care are potentially even more dependent on their children.

As the population ages, it is likely that an increasing number of adults will be called upon to assist and support a parent with diminishing independence or a chronic health problem. This trend appears to have already begun. For example, in 2007, the number of people aged 45 and over providing assistance and care to a chronically ill senior was 2.7 million, up 670,000 from five years earlier (in 2002). The increase was especially substantial for women, with the proportion of women aged 45 and over who informally provided care rising from 18% in 2002 to 22% in 2007. For men, the proportion remained unchanged (19%). In most cases (62%), the receiver of care was a parent or parent-in-law.²

Assisting one's ailing parents or parents-in-law is a self-evident responsibility for many people. However, different constraints on time and resources may make this an onerous responsibility. The majority of caregivers are employed—often

full-time.³ Also, even though their own children may be teenagers or young adults and therefore require less attention, it is increasingly common, as fertility extends to more advanced ages, for caregivers in their forties to still be responsible for young children.⁴

These occupational and family commitments can put pressure on caregivers. A Statistics Canada study has shown, for example, that some workers who provided care—especially high-intensity care—felt stressed and less satisfied with how they were balancing their work life and their home life. Those who provided such care while working long hours may have significant feelings of guilt.⁵

In addition to the constraints related to having a job and working long hours, many caregivers live some distance from the parent to whom they are providing care. It is possible that, for them, the costs of assisting an ailing parent, in both time and money, are even greater. But is this really the case, and if so, to what extent?

Little attention has been given to the question of how long-distance caregiving affects the caregiver's social and economic life. In a context where individuals and families are increasingly geographically dispersed, a number of questions are of interest. What proportion of caregivers live an hour or more by car from the parent to whom they are providing care? What socioeconomic differences are there between caregivers who live farther from their parent and those who live closer? Do the types of support provided vary based on the distance between the caregiver and the assisted parent? And finally, does living further away have negative effects on caregivers in financial, occupational, social and family terms? The main objective of this study is to answer these questions.

The first section of this study provides a statistical profile of caregivers who live far from their parents and compares them with caregivers who live close by. The second section looks at the different financial, social and work schedule impacts that are associated with living relatively far from the care recipient.

This study focuses on individuals aged 45 and over whose parent or parent-in-law is the primary receiver of care, that is, the person to whom they have devoted the most time and resources in the past twelve months because of a long-term health problem or physical limitation. The term 'care receiver' or 'care recipient' will be used to designate these persons. Data for the study are drawn from the 2007 General Social Survey (GSS) on the family, social support and retirement. (For more information, see the text box entitled "What you should know about this study.")

What you should know about this study

Data source

The analyses contained in this article are based on data from the General Social Survey (GSS) conducted by Statistics Canada in 2007 on the family, social support and retirement. This survey covers some 23,000 Canadians aged 45 and over, and living in private residences in the ten provinces.

Study population

The population that is the focus of this study consists of persons who have provided assistance to a parent or parentin-law and who is the primary care receiver. The primary care receiver is defined as the person to whom the respondent devoted the most time and resources during the last twelve months as a result of a chronic health problem or physical limitation. The assistance provided may have been given either throughout the entire year preceding the survey or during a shorter period of time during the preceding year. It is not possible to determine how the care was distributed over the course of the year.

This population corresponds to a sample of 2,700 persons, representing 1.65 million Canadians.

In the 2007 GSS, caregivers were asked where the primary care receiver was living when the unpaid help was provided. Four distance categories corresponding to the travel time between the caregiver's home and that of the care receiver were created (survey participants did not have to provide information on the distance in kilometres): 1) same neighbourhood (30 minutes or less by foot or bus); 2) surrounding neighbourhood or community (less than an hour by car); 3) between one hour and less than a half day's journey by car; and 4) more than a half day's journey by car.

The first section of the article presents general information on the proportion of caregivers living relatively close to their parent's home. In particular, it provides information on the respondents who lived in the same household or building as their primary care receiver. However, in the subsequent sections, these respondents are excluded from the analysis. This group of caregivers living in the same household as their parent has specific characteristics and is dealt with in a supplementary text box entitled Living in the same household or building as the cared-for parent.

It should be noted that the analysis provides representative information on caregivers whose primary care-receiver is one of their parents. Thus, it does not cover all caregivers.

Terminology

In this article, persons who assist their parent(s) or provide him or her with care are called 'caregivers.' Parents receiving care are referred to as 'care receivers' or 'care recipients.'

Statistical models

The distance between the place of residence of the caregiver and that of the assisted parent is not the only factor that may explain why some caregivers experience economic and social consequences. To check the robustness of our results with respect to geographic distance, we created logistic regression models. In these models, the dependent variables have two possible values: yes or no. We present the results for two dependent variables: having incurred expenses because of the care provided to the receiver, and missing work. Models were also created for the following three dependent variables: having had to cancel holiday plans because of the care provided to the receiver; having reduced one's social activities; and having reduced one's family time.

The results from these models are analysed using odds ratios. These are employed to evaluate the extent to which the distance from the caregiver's place of residence is associated with experiencing a given consequence when the other factors are held constant (in other words, when neutralizing the effect of the other variables assumed to be associated with the risk of experiencing that consequence).

The factors considered in the model include the number of hours and support activities that caregivers provided to receivers. Variables indirectly associated with the care receiver's health status are also included, such as type of dwelling occupied by the care receiver (private household, supervised dwelling, institution), number of hours of care received from public- or private-sector employees, physical or mental health problems, and whether the main receiver died during the last twelve months; whether or not the caregiver had to move in with the receiver for the duration of the assistance. Lastly, caregiver characteristics are considered: sex, education level, number of brothers and sisters still living, employment status and flexibility of working conditions, and presence of children in the home. Taking these factors into account ensures that a possible association between geographic distance and the consequences is attributable to the distance.

Just over one caregiver in five lives more than an hour away from the assisted parent

In 2007, an estimated 359,700 persons provided help to a parent despite living more than an hour away. These caregivers accounted for one-fifth (22%) of the study population. Even so, a large number of caregivers lived nearby. Almost half (46%) of caregivers lived in the same neighbourhood as their parent, that is, they lived less than 30 minutes away by foot or bus. Another 13% lived in the same household (Table 1).

British Columbia had the largest proportion of caregivers living far from their parent. In that province, nearly one-third (30%) lived more than an hour away from their primary receiver, twice the proportion as in the Atlantic provinces, where they accounted for 14% of caregivers (Table 1).

One of the reasons that may explain this large proportion is that caregivers who live in British Columbia are more likely than those in other provinces to have been born outside the province, either elsewhere in Canada or in another country. Of caregivers living in British Columbia,

more than half (52%) were not born in that province. The corresponding proportions were 33% in Ontario, 17% in the Atlantic provinces and 10% in Quebec. It would appear that caregivers who live in the province where they were born are more likely to live near the parent to whom they are providing care (who probably also lives in that province).

Caregivers living further from the care receiver tend to be more educated and concentrated in the largest metropolitan areas

Persons with higher education levels are known to also be more likely to have left their place of origin and, if they have done so, to have migrated to large cities.⁶

Caregivers who lived far from the parent to whom they were providing care were both more educated and more likely to live in a large urban area.

Indeed, 61% of persons living more than a half day's journey from the care receiver had a university diploma, compared to 28% of persons living in the same neighbourhood. Also, among caregivers living far

from the assisted parent, more than half (58%) lived in one of Canada's six largest metropolitan areas, namely those with a population of 1 million or more—Toronto, Montreal, Vancouver, Ottawa-Gatineau, Calgary or Edmonton. Among caregivers who lived in the same neighbourhood as the care recipient, the corresponding proportion was 35%.

Since caregivers living a greater distance from their care receivers are, on average, more educated and more concentrated in urban areas than those living closer to their care receivers, it is not surprising to find that they also have higher incomes. Among caregivers living furthest away, nearly two-thirds (64%) had a household income of \$80,000 or more. The corresponding proportion was 49% for caregivers living in the same neighbourhood as their primary receiver of care (Table 2).

Regardless of the distance just over 7 in 10 caregivers had employment income

For some people, having a job can be a major constraint on providing care. The results show that regardless of the place of

Table	ı	Gender and r	egion of	residence of	caregivers	by proximity	lo care receiver

	Same household †	Same neighbourhood	Surrounding neighbourhood or community (less than one hour by car)	Between one hour and less than half day's journey by car	More than a half day's journey by car
			percentage		
Total	13	46	20	15	7
Men	13	48	18	15	7
Women	13	44	21	15	6
Region of residence					
Atlantic region	15	50	21*	10*	4
Quebec	11	50	21	16	3*
Ontario	13	44	20	16	7
Prairie region	12	48	19	13	8
British Columbia	14	38	19	16	13*

[†] reference group

^{*} statistically significant difference from reference group at p < 0.05 Source: Statistics Canada, General Social Survey, 2007.

residence, most caregivers had a job (approximately 70%). The proportion of caregivers who retired did not exhibit statistically significant variations according to geographic distance. However, caregivers living in the same neighbourhood as the assisted parent were more likely than those living more than a half day's journey away not to have a paying job (Table 2). This result is consistent with the finding that persons who help a parent living far away are more likely to have higher incomes.

Caregivers who lived more than a half day's journey away from their primary care receiver were also less likely to have children in the home (38%) than were caregivers who lived closer to their receiver (49%). That said, these children are mostly young adults or teenagers, which likely reduces the caregivers' family responsibilities.

The further away caregivers live, the less likely they are to have come from a large family

The number of siblings in a family can affect the distribution of tasks and the sharing of responsibilities when a parent requires care. All things being equal, it is likely that in the largest families, the burden on each adult child will be less than in smaller families.

The further away caregivers live from care receivers, the less likely they are to come from a large family (four or more brothers and sisters) (Table 2). Indeed, one-third of caregivers who lived more than a half day's journey away from the care recipient parent reported having at most one brother or sister still living (33%); in each of the other distance categories, the corresponding proportion was approximately 10 percentage points lower.

It is possible that some people living more than a half day's journey away from their ailing parent are those who provide care because they are the only ones who are able to do so in their family. Since baby boomers tend to have smaller families than their parents, geographic distance may become a more important barrier in the coming years, when baby boomers grow old and require care themselves.

Caregivers who live further away are more likely to share the responsibilities for care with a professional caregiver (from the public or private sector). Indeed, for 28% of caregivers who lived more than a half day's journey away, the care receiving parent was receiving at least five hours of professional care per week. The corresponding proportion was 12% for persons living in the same neighbourhood as the parent to whom they were providing care (Table 2). This result is consistent with the finding that caregivers living further away from the parent to whom they are providing care tend to come from smaller families and may more often have to draw on more formal sources of assistance.

Despite living far away, caregivers often provide the same types of assistance, and sometimes in larger proportions

Some types of support are more easily provided when the caregiver lives close to the person assisted, such as transportation, shopping, banking or bill paying. And indeed, the proportion of caregivers living in the same neighbourhood as their primary care receiver and engaging in these types of activities was higher (86%) than the corresponding proportion of caregivers living more than a half day's journey away (79%).

Even so, caregivers who live further from their parent perform a great variety of tasks. There were few differences between them and those caregivers living close to the care receiver in the likelihood of assisting with home maintenance and outside work, medical treatment and co-ordination of caregiving tasks. However, caregivers living more than a half day's journey from their parent were more likely than others to have provided domestic assistance, such as meal preparation, meal clean-up

and housekeeping, and a greater proportion of them provided personal care (Table 2).

One possible explanation for these findings is that because of the sizeable distance to be travelled. some caregivers may have temporarily stayed with their parent when providing care. Staying in the parent's home (because going back to one's own home on the same day is not realistic), and therefore sharing a number of meals, may be conducive to performing numerous domestic tasks that would not necessarily be performed if only spending a short period of time with the care receiver. Additionally, those staying the night or longer may be prompted to provide additional assistance with various aspects of personal care. That said, the frequency of providing this intensive type of care is lower than for caregivers who reside nearby.

Data from the GSS show that the greater the distance between the caregiver and the receiver, the less frequent the caregiving visits occurred. For example, 85% of persons who lived more than a half day's journey away reported having seen the person they were assisting once a month or less. Conversely, 93% of caregivers living in the same neighbourhood as the assisted parent saw him or her at least once a week or more (Table 2). A recent American study on long-distance caregiving supports this finding. According to that study, even though the types of care generally varied little among caregivers living close or far away, the frequency of care varied considerably.

Living far from the care receiver increases the risk of having extra expenses

The first part of this article profiled caregivers according to whether or not they lived near the care receiving parent. This second part focuses on the possible consequences related to living a considerable distance from the assisted parent. In the GSS, caregivers were asked whether assisting someone had caused them

Table 2 Caregiver characteristics by distance from care receiver

	Same neighbourhood †	Surrounding neighbourhood or community (less than one hour by car)	Between one hour and less than half day's journey by car	More than half day journey by
		percenta	ge	
Education level				
University	28	30	38*	61*
Other postsecondary	38	42	43	28*
High school diploma or less	34	28*	18*	11 [*
Area of residence				
Greater census metropolitan areas (CMA)	35	46*	52*	58*
Other census metropolitan areas	25	23	19*	14 ^E *
Census agglomerations	18	13*	13*	10 ^E *
Outside of census metropolitan areas and census				
agglomerations	22	18	17*	17 ^E
Employment status				
Paid employment or self-employed	73	70	73	76
Retired	16	18	16	19 ^E
Nithout paid employment	11	12	11	6 ^E *
Household revenue				
Less than \$40,000	17	15	14	7 E*
\$40,000 to \$79,999	34	37	30	28
\$80,000 or more	49	48	56	64*
Presence of children in the home	17	10	30	
None	51	54	50	62*
One child or more	49	46	50	38*
Number of siblings still living	1/	70	30	00
None or one	23	23	24	33*
Two or three	41	44	46	45
Four or more	36	33	46 30*	45 22*
Type of help given to the parent	30	30	30	2.2
Transportation, shopping, banking or paying bills	86	83	78*	79*
Meals, dishwashing, house cleaning, laundry and sewing	46	44	49	60*
Housekeeping or outdoor chores	46	41	50	48
Help with personal care	28	27	33	38*
Help with treatment and medical care	21	17	21	26
Assist with co-ordination of health care needs	44	46	42	49
Living with the care receiver	2 ^E	3 €	3 ^E	8 ^E *
Number of hours allocated per week to caregivin		(1	/1.	50
Four or fewer hours	57	61	61*	58
5 to 9 hours	20	19	18	13 ^E *
10 to 14 hours	10	10	8 E	9 E *
15 hours or more	12	11	11E	21*
Frequency of caregiving				- 1
Everyday	23	7*	4 ^{£*}	8 ^E *
At least once a week	70	72	40*	7 [*
Once a month or less	7	20*	56*	85*
Professional help with caregiving (government o	r paid employee)			
No help	73	71	65*	52*
Fewer than 5 hours per week	15	16	17	20 ^E
More than 5 hours per week	12	13	18*	28*

Source: Statistics Canada, General Social Survey, 2007.

statistically significant difference from reference group at $\rm p < 0.05$

to have extra expenses; to miss full days of work; to cancel holiday plans; to reduce the number of their social activities; or to spend less time than they would have liked with their children or spouse.

Living further from the receiver substantially increased the probability of incurring extra expenses. Six in ten caregivers (62%) who lived more than a half day's journey away from their primary receiver had incurred extra expenses as a result of the assistance they provided. This was twice the proportion of those living in the same neighbourhood as their primary receiver (Chart 1).

Apart from distance there were a number of other factors that were associated with a higher probability of having extra expenses (e.g., education level and number of hours of care provided). However, even when these factors were held constant (Table A.1), the odds of having extra expenses were 3.0 times higher for caregivers living more than a half day's journey away than for those

living in the same neighbourhood. This finding is consistent with the fact that the greater the distance to be traveled, the higher the related costs are likely to be. For those who must travel by air in order to provide care, this reality is clear.

Moreover, when providers of informal care had to incur extra expenses, the expenses were, on average, higher for those who lived far away than for those living closer. Indeed, 39% of those living more than a half day's journey away from the parent being assisted reported that they had spent, on average, more than \$500 per month on care. Only 11% of those living in the same neighbourhood reported spending an average of \$500 per month.

Despite these sizeable extra expenses, caregivers who had to travel great distances were no more likely than other caregivers to have had access to money from government programs (5%). Also, there was no difference in the likelihood of having access to tax

benefits (credits or refunds) for carerelated expenses between caregivers living close or caregivers farther away. Only about 2% caregivers had access to such benefits.

Although caregivers living some distance away from the care receiver were more likely to have spent extra amounts on caregiving, they were also more likely to be in a higher income bracket (Table 2) than those living close to the care recipient.

Providers of informal care who lived further from the care receiver were more likely to miss work

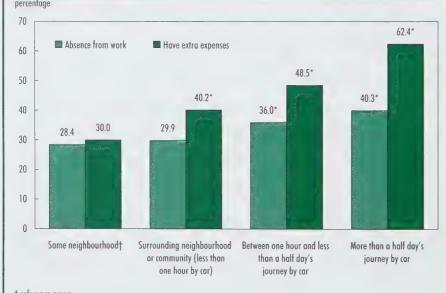
It is possible that the expenses incurred by caregivers living a greater travelling distance away are more difficult to take on when they must take time off work because of the care they provide. This appears to be the case for many: 40% of providers of informal care who lived more than a half day's journey away from their chronically ill parent reported missing full days of work in order to provide the parent with care, compared to 36% of those living between an hour and less than a half day's journey away and 28% of those living in the same neighbourhood (Table A.1).

However, when the other factors associated with the possibility of missing work were considered, persons living more than an hour away and those living more than a half day's journey away were no more likely than those living in the same neighbourhood to have missed work (Table A 2).

This is likely due to the fact that other factors in the model had a substantial impact on the probability of missing work. Two of these factors proved to be associated with a higher risk of missing work: having had to stay with the care receiver because of the types of care provided (2.3 times higher risk of missing work) and having provided a large number of hours of care to the care recipient (for those who had provided 15 hours or more of care, the risk of missing work was 3.3 times higher than for

Chart 1 The farther away a caregiver lives from the care receiver, the more likely they are to have extra expenses or be absent from work

percentage



† reference group

 * statistically significant difference from reference group at p < 0.05 Source: Statistics Canada, General Social Survey, 2007.

those providing less than five hours of care) (Table A.2).

Caregivers who lived more than a half day's journey from the parent they were assisting stood out on both these critical factors. First, they were more likely than those living closer to have stayed with their parent in order to provide assistance (8%, compared to 2% for those living nearby). Second, persons living further away were more likely to have provided 15 or more hours of care per week, possibly because of the intensity of the assistance provided during their stays (Table 2).

According to the results of a supplementary analysis (Table A.2, Model 2),⁸ living far away from the assisted parent appears to be positively associated with missing days of work as a result of providing care. However, this relationship is indirect and disappears once some caregiving intensity measures (hours of care and staying or moving in to provide care) have been taken into consideration.

Caregivers who lived further from the receiver were no more likely to have to cancel holiday plans

Apart from financial consequences and time away from work, we looked at the negative effect of distance on other aspects of the caregiver's life: cancelling holiday plans, reducing social activities, and spending less time than desired with their children or spouse.

The geographic location of the caregiver in relation to the care receiver was not related to these types of consequences. Instead, other factors associated with intensity of care, such as the number of hours and the number of types of care provided, had a negative effect (Table A.1).

Among caregivers who lived further away from the receiver, women were more likely than men to take time off work

A supplementary statistical analysis was conducted to determine whether

the different factors associated with an increased probability of having extra expenses and missing work were different for caregivers living further away from the assisted parent than for those living in the same neighbourhood as the parent or in the surrounding area (detailed results not shown). With respect to financial resources, these factors were nearly the same regardless of distance. In fact, for both groups, the two factors that most affected the likelihood of having extra expenses were the number of types of care provided and the number of hours devoted to care.

The factors that were related to increasing the probability of missing work were very similar between caregivers living nearby and those living further from the care receiver. For both groups, engaging in more types of support activities and providing care to a greater overall number of people were associated with a greater probability of missing work.

Living in the same household or building as the cared-for parent

In some cases, it may be easier for caregivers to live in the same dwelling or the same building as the care receiver. One of the characteristics of caregivers living in the same dwelling or the same building as the parent to whom they provide informal care is the small size of their family, that is, the number of siblings still living. Among caregivers who lived in the same dwelling or building as the care receiver, 41% said they had at most one brother or sister still living. Among other caregivers, the proportion was 24%.

Nearly 1 in 5 caregivers (18%) who lived with the care receiver did not have a job; this was higher than for other caregivers (10%). This characteristic is consistent with the time these caregivers devoted to care. Living in the same dwelling or building as the assisted person makes it possible to devote much more time and provide more types of care. In fact, more than half (57%) of caregivers living in the same household had devoted more than 10 hours per week to the parent to whom they were providing care. Furthermore, the number of hours of care per week is estimated at 29 for

these caregivers, which is almost three times the number for caregivers living outside the receiver's dwelling or building. The latter devoted an average of 8 hours per week to care.

These results were also reflected in the number and type of support activities provided: 38% of caregivers who lived with the care receiver provided five to six types of support activities, which is twice as high as for other caregivers (17%).

In addition to the information about those who provided care, the 2007 General Social Survey contains information on persons who receive care because of a chronic health problem. It is possible to determine the health status of persons whose primary caregiver was their child. Those who lived with their caregiver were proportionally less likely to be in good health. More specifically, 44% of care receivers who lived with their primary caregiver described their state of health as fair or poor. The corresponding proportion was 33% for care receivers whose caregiver lived an hour or more away from their place of residence (by car).

Table A.1 Percent of caregivers who experienced social and economic consequences, by select characteristics

	Type of consequences							
	Extra expenses	Absence from work	Cancel holiday plans	Reduction of social activities	Reduction of family time			
			percentag	e				
Caregiving factors								
Distance from care receiver								
Same neighbourhood (30 minutes by foot or bus)†	30	28	23	40	24			
Surrounding neighbourhood or community (less than one hour by car)	40*	30	25	41	23			
Between one hour and less than a half day's journey by car	49*	36*	23	43	30			
More than a half day's journey by car	62*	40*	27	40	24 ^E			
Moved in with the care receiving parent								
Yes	73*	74*	59*	77*	73*			
No†	37	30	23	40	24			
Number of hours allocated per week to caregiving	0,		2.0		- ,			
Four or fewer hours†	31	23	13	29	17			
5 to 9 hours	41*	35*	33*	49*	28*			
	48*	42*	38*	60*	51*			
10 to 14 hours		42 62*	50*	70*	54*			
15 or more hours	60*	0.2	20	/ 0	54			
Number of caregiving activities performed	0.7	10	1.0	0.4	10			
One to two†	26	19	12	24	13			
Three to four	41*	34*	26*	48*	28*			
Five to six	61*	57*	50*	67*	53*			
Total number of care recipients								
One†	35	29	21	37	20			
Two	40*	32	26*	43*	29*			
Three or more	51*	40*	35*	55*	36*			
Type of problem of the parent receiving care								
Physical or mentalt	35	29	22	36	22			
Physical and mental	50*	37*	31*	56*	37*			
Other	21 ^E *	23 ^E	F	21 ^F *	F			
Death of care receiver								
Deceased	48*	41*	44*	56*	39*			
Not deceased†	37	30	22	39	24			
พงก ของอนรอบ Professional help with caregiving (government or paid em _l		30	LL	0 /	24			
		28	22	38	24			
No helpt	35							
Fewer than 5 hours per week	40	34	27	43	24			
More than 5 hours per week	49*	40*	31*	54*	34*			
Type of dwelling occupied by parent			0.0		0.5			
Private household†	36	30	23	40	25			
Supervised dwelling	50*	36	23	44	24			
Institution	38	32	25	40	24			
Caregiver characteristics								
Gender								
Men†	36	26	19	35	18			
Women	40	36*	27*	45*	31*			
Education level								
University	46*	33*	27*	45*	28*			
Other postsecondary	38*	32	23	41*	26*			
High school diploma or less†	29	27	21	34	19			
Employment status and flexibility of work arrangements	2,		21	,	.,			
Paid employment with low flexibility†	38	29	23	44	29			
Paid employment with high flexibility	36	31	23	42	26			
Self-employed	42	34	21	35*	24			
Seir-emproyed Retired	42		27	40	24 14 ^{{*}			
Without paid employment	34	•••	25	36*	29			

Table A.1 Percent of caregivers who experienced social and economic consequences, by select characteristics (continued)

		Type of consequences							
	Extra expenses	Absence from work	Cancel holiday plans	Reduction of social activities	Reduction of family time				
			percentag	e					
Presence of children in the home									
None†	39	33	26	41	18				
One or more	37	30	21*	41	30*				
Number of siblings still living									
One or none†	40	36	26	40	22				
2 or 3	39	30	24	43	30*				
4 or more	35	29*	21	38	21				

reference group

Table A.2	Odds ratio of having	extra expenses or bein	a absent from work	for caregivers
INDIV FILE	Anna Intio At Hatilli	CALLA CAPCIISCS OF BUILD	M MNSCIII IIVIII WVIK	IVI THICHITELD

		work, model 1	work, model 2
		odds ratio	
Caregiving factors			
Distance from care receiver			
Same neighbourhood (30 minutes by foot or bus)†	1.00	1.00	1.00
Surrounding neighbourhood or community (less than one hour by car)	1.73*	1.11	1.15
Between one hour and less than a half day's journey by car	2.27*	1.46	1.52*
More than a half day's journey by car	3.02*	1.14	1.68*
Moved in with care receiving parent			
Yes	2.07*	2.29*	
No†	1.00	1.00	
Number of hours allocated per week to caregiving			
Four or fewer hourst	1.00	1.00	
5 to 9 hours	1.59*	1.47*	
10 to 14 hours	1.61*	1.44	
15 or more hours	2.31*	3.35*	
Number of caregiving activities performed	1.33*	1.42*	1.54*
Total number of care receivers			
One†	1.00	1.00	1.00
Two	1.29	1.57*	1.36*
Three or more	1.90*	1.87*	1.54
Type of problem of the parent receiving care			
Physical or mental†	1.00	1.00	1.00
Physical and mental	1.60*	1.25	1.15
Other	0.69	1.32	1.11
Death of care receiver			
Deceased	0.96	0.98	1.22
Not deceased†	1.00	1.00	1.00

^{*} statistically significant difference from reference group at p < 0.05 Source: Statistics Canada, General Social Survey, 2007.

Table A.2 Odds ratio of having extra expenses or being absent from work for caregivers (continued)

	Extra expenses	Absence from work, model 1	Absence fro work, model
		odds ratio	
Professional help with caregiving (government or paid employee)			
No helpt	1.00	1.00	1.00
Fewer than 5 hours per week	1.11	1.23	1.16
More than 5 hours per week	1.24	1.37	1.38
Type of dwelling occupied by parent			
Private household†	1.00	1.00	1.00
Supervised dwelling	1.73*	1.37	1.35
Institution	1.14	1.42	1.29
Caregiver characteristics			
Gender			
Men†	1.00	1.00	1.00
Women	0.96	1.42*	1.40*
Education level			
University	1.71*	1.15	1.03
Other postsecondary	1.28	1.06	1.12
High school diploma or less†	1.00	1.00	1.00
Employment status and flexibility of work arrangements			
Paid employment with low flexibility†	1.00	1.00	1.00
Paid employment with high flexibility	0.76	0.82	0.85
Self-employed	1.03	1.25	1.27
Retired	0.85		
Without paid employment	0.80		
Presence of children in the home			
Nonet	1.00	1.00	1.00
One or more	1.03	0.94	0.87
Number of siblings still living			
One or none†	1.00	1.00	1.00
2 or 3	1.02	0.73	0.69*
4 or more	0.97	0.82	0.78

[†] reference group

Source: Statistics Canada, General Social Survey, 2007.

However, there were differences between men and women caregivers with respect to geographical distance from the care receiver. Among those living more than an hour's journey away (including those living more than a half day's journey away), 46% of women missed days of work to provide care, compared to 27% of men. Among those living less than an hour away, the corresponding proportions were 32% for women and 26% for men. Women were generally more likely to provide care than men. It appears that when women live further from their parents, they are more inclined than men to miss days of work to look after their parents (either because it is possible for them to do so or because they are more inclined than men to take on the possible consequences of this absence from their work).

Summary

Many people provide assistance to their parents even though they live relatively far away. In fact, one fifth of the population aged 45 and over whom provided care to a parent lived more than an hour away. The profile of these caregivers was different from that of caregivers who lived closer to the care receiving parent. Those who lived farther away were generally more educated, had higher incomes, had on average fewer brothers and sisters, and tended to live in the largest metropolitan areas.

Distance appears to be one of the most influential factors for caregivers related to the risk of experiencing financial consequences. People who lived further away were found to be much more likely to have extra expenses. When they did, they spent larger amounts. Also, although factors

^{*} statistically significant difference from reference group at p < 0.05

other than geographic distance (e.g., intensity of care provided) were better predictors of the risk of missing work, caregivers living further from the assisted parent were found to be more likely to miss full days of work. However, the geographic constraint was not associated with the negative impacts of caregiving on the caregiver's social or family life.



Mireille Vézina and Martin Turcotte are analysts in the Social and Aboriginal Statistics Division at Statistics Canada.

- Cranswick, K., and Dosman, K. (2008). Eldercare: What we know today. Canadian Social Trends, 86, Statistics Canada, Catalogue no. 11-008.
- 2. Cranswick and Dosman (2008).
- Pyper, W. (2006). Balancing career and care. Perspectives on Labour and Income, 11, Statistics Canada, Catalogue no. 75-001.
- Vézina, M. and M. Turcotte. (2009). Forty-year-old mothers of pre-school children: A profile. Canadian Social Trends, 88, Statistics Canada, Catalogue no. 11-008. Williams, C. (2004). The sandwich generation. Perspectives on Labour and Income, 5, Statistics Canada, Catalogue no. 75-001.
- 5. Pyper, W. (2006).

- 6. Dion, P., and Coulombe, S. (2008).
 Portrait of the mobility of Canadians in 2006: Trajectories and characteristics of migrants, Statistics Canada, Report on the Demographic Situation in Canada: 2005 and 2006, p. 83-114.
- Metlife Mature Market Institute. (2004).
 Miles away: the Metlife study of long-distance caregiving Findings from a national study by the national alliance for caregiving with Zogby international July 2004.
- 8. In this supplementary logistic regression analysis, all factors in the first model are included except having stayed with the care receiver and the number of hours of care. When these two variables are not included in the regression, a statistically significant relationship is observed between greater distance and a greater risk of missing work as a result of providing care to the receiver (this is the same finding as presented in Table A.1, where the results are shown in percentage form).

Retail and customer service in French

by Martin Turcotte

or most francophones (people whose first language learned is French), being greeted and served in their language when they shop, eat out or go to the hairstylist is not a concern. In fact, a majority live in areas where most residents are also francophones. It's a different story, however, for those who live in regions where their mother tongue is a minority language. This may also be true for francophones who reside in areas such as Montréal where French, though the majority language, is a minority in some places.

To what extent are francophones able to get service in French when they visit businesses in their community? This article provides some answers to that question, focusing on the prevalence of the knowledge of French among sales and service workers who interact directly and routinely with consumers in the course of their work (For more information about the occupations included in the study, see "What you should know about this study").

Previous studies have examined the availability of health care or government service in French.² However, very little research has been done on the knowledge and use of French among workers in retail and consumer service outlets. This study attempts to determine the extent to which francophone consumers

are able to use their language on a daily basis in "routine" retail and service transactions. A number of occupations have been omitted as most people have only occasional contact with workers in those occupations, for example with real estate agents, physicians and police officers.

In addition to looking at how prevalent knowledge of French is among workers in sales and service occupations, the article also examines the proportion of workers who use the language while performing their duties.

The first section of the article presents data for Canada, the provinces and territories. It contains information on the knowledge and use of French among sales and service workers.

The second part of the article focuses on sales and service workers in four census metropolitan areas (CMA): Ottawa-Gatineau (with a distinction between the Quebec and Ontario sides), Moncton, Greater Sudbury and Montréal. These CMAs have been chosen because of their specific demolinguistic context and because the number of workers that understand and are able to use French is high enough to allow for comparisons over time.

In the Ontario part of Ottawa-Gatineau, Greater Sudbury and

Moncton, francophones are a minority. It may be a challenge for them to receive service in French at local businesses. In the Montréal CMA, francophones are in a majority and account for about two-thirds of the population. However, this proportion varies widely within the CMA - francophones while representing 80% of the population in the northern and southern-most sections of the CMA, are slightly in the minority on the Island of Montréal $(49.8 \% \text{ in } 2006^3)$ and are a minority in all municipalities on the West Island. For example, francophones make up 20% of the population in the municipalities of Dollard-des-Ormeaux and Côte-Saint-Luc.⁴ As a result of this linguistic dynamic, understanding how French is used in the marketplace in Montreal is important.

In short, in these four metropolitan areas, contact between francophones and other linguistic groups is likely regular notably during commercial transactions. From census data, it is possible to determine what proportion of workers can, with their knowledge of French, offer services in this language (according to their place of work). In the final part of the article, those sales and service workers most or least likely to be proficient in French are examined.

What you should know about this study

The data used are from the 1991, 1996, 2001 and 2006 long census questionnaires (completed by 20% of the Canadian households). Only persons in the employed labour force are included in the study, that is, people who had a job in the week preceding the census. In addition, respondents had to have a usual place of work or to be working at home (in other words, people with no fixed work location are excluded). The statistics concerning knowledge and use of French among sales and service workers are based on location of work and not on place of residence. For example, references to the proportion of central Montréal's workers who were able to carry on a conversation in French relate to persons working in a business outlet located in the central area.

Definitions

Knowledge of French: In the census, each household member is asked whether he or she can speak "English or French well enough to conduct a conversation". People who stated that they spoke "French only" or "English and French" are deemed to have knowledge of French. It should be noted that the ability to carry on a conversation is self-assessed by respondents and that the ability to speak French does not necessarily mean that service in French will be offered automatically. Moreover, proficiency can vary substantially from person to person.

Use of French at work: The census contains the following questions: "In this job, what language did this person use most often?" and "Did this person use any other languages on a regular basis in this job?" Respondents who answered French to either of these questions were deemed to be using French at work. More detailed data on the use of French "on a regular basis" or "most often" are provided in the tables. Francophones: In this study, francophones are persons

who reported that French was the first language they learned in childhood (their mother tongue). Some respondents reported that they had learned more than one language at the same time. They are considered francophones if one of the languages was French.

Allophones: Allophones are people who stated that the first language they learned in childhood was neither English nor French. Respondents who reported a non-official language along with French are considered francophones. Similarly, people who reported a non-official language along with English are considered anglophones, unless they also mentioned

French as one of their mother tongues (in which case they are deemed to be francophones).

Anglophones: In this study, anglophones are persons who reported that English was the first language they learned in childhood (their mother tongue). Respondents who reported that they had learned English and French simultaneously are considered francophones for the purposes of this study. French-speaking population: Some sections of the article refer to data from the Survey on the Vitality of Official-Language Minorities. Those data relate to the French-speaking population outside Quebec, that is, people who: (a) have French as their mother tongue, either alone or with another language; (b) have a non-official language as their mother tongue (we refer to them as allophones) and speak French but not English; (c) have a non-official language as their mother tongue, know both English and French and speak either a non-official language or French, alone or with another language, most often at home.

Sales and service occupations

The National Occupational Classification-Statistics (NOC-S) is based on the National Occupational Classification (NOC), which was developed, and is maintained, by Human Resources and Skills Development Canada (HRSDC). It provides a systematic classification structure to identify and categorize the entire range of occupational activity in Canada. It has 10 broad occupational categories.

This study focuses on broad category G, sales and service occupations. The official titles of the occupations included in this analysis are as follows: retail salespersons and sales clerks; cashiers; maîtres d'hôtel and hosts / hostesses; bartenders; food and beverage servers; travel counsellors; airline sales and service agents; ticket agents, cargo service representatives and related clerks (except airline); hotel front desk clerks; tour and travel guides; outdoor sport and recreational guides; casino occupations; operators and attendants in amusement, recreation and sport; hairstylists and barbers; estheticians, electrologists and related occupations; service station attendants; and grocery clerks and store shelf stockers. Some occupations were combined with related occupations in Table 4.

About 50% of the occupations in the sales and service category were not included in this study. Some do not necessarily involve direct contact with consumers and

What you should know about this study (continued)

therefore have no bearing on consumers' ability to obtain service in French (for example, retail trade supervisors, chefs and cooks, retail and wholesale buyers, security guards). Other occupations involve contact with "citizens" rather than consumers (for example, police officers). In addition, some occupations are associated with the sale of specialized products and service purchased by members of the public and by businesses and organizations (for example, insurance agents and brokers). Since this study is about workers who routinely come into contact with the public, those occupations were also excluded. In some occupations, workers may or may not have direct contact with customers (e.g., pet groomers). As census data do not provide information about whether there is contact with customers or not, the decision was made to err on the conservative side and exclude occupations that potentially do not involve interaction with

Census metropolitan areas and census agglomerations

For the purposes of this article, urban area is narrowly defined. There are two types of urban areas: census metropolitan areas (CMAs) and census agglomerations (CAs). A CMA or a CA consists of one or more neighbouring municipalities situated around a major urban area (referred to as an urban core).

A CMA must have a total population of at least 100,000, of which 50,000 or more must live in the urban core. A CA must have an urban core population of at least 10,000. In 2006, there were 33 CMAs and 110 CAs.

For the data to be comparable over time, the 2006 CMA boundaries were applied to the data from the 2001 and 1996 censuses.

Montréal CMA, Island of Montréal, city of Montréal and Montréal's city centre

Montréal's CMA includes the city of Montréal as well as a hundred more municipalities surrounding it. Some are located in the suburbs, some on the Island of Montréal. The north and south suburbs, as defined in this study, include the municipalities of Laval, Longueuil, Terrebonne, Brossard and many others. The Island of Montréal includes the city of Montréal as well as 15 other municipalities which are classified in the tables under the category other municipalities on the Island of Montréal.

In this study, Montréal's city centre is defined as the rectangular area bisected by Sainte-Catherine Street, the main commercial artery. The area is bounded on the west by Atwater Street, on the north by Sherbrooke Street, on the east by Amherst Street and on the south by Saint-Antoine Street. Between Atwater Street and Guy Street, the southern boundary is located just north of the Ville-Marie highway.

Portrait of Canada and its urban areas

The proportion of sales and service workers who know French is generally higher than the proportion of francophones in the region

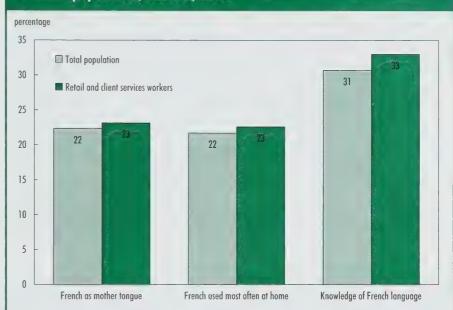
In 2006, there were 6,970,405 francophones in Canada; in this article, a francophone is someone whose mother tongue, or one of them, is French (for more information on these concepts, see "What you should know about this study"). At that time, francophones made up 22% of the population. The proportion of Canadians who could carry on a conversation in French was higher at 31%, because some people whose mother tongue is not French are able to carry on a conversation in French.

People whose job was to serve customers in stores, restaurants and other service outlets were somewhat more likely to know French than Canadians as a whole. In 2006, 33% of these workers were able to carry on a conversation in French. The gap between sales and service workers and the population of a particular area with respect to knowledge of French was observed in almost every province (Table 1). In a number of regions, sales and service workers were more likely to know French than workers in other occupations. This may be attributed to the fact that sales and service workers are. on average, younger than other workers (median age of 33 years for sales and service workers compared to 41 years among other workers). Indeed, outside Quebec, young adults are more likely to be bilingual than are people in other age groups.⁵

As shown in Chart 2, in all areas where 80% or more of the population was francophone almost all sales and service workers were able to carry on a conversation in French.

In urban areas where francophones constitute a minority, there was a much greater range and variability in the knowledge of French. Knowledge of French among the residents of a

Chart 1 Retail and client services workers are more likely to be able to sustain a conversation in French than the overall population, Canada, 2006



Source: Statistics Canada, Census of Population, 2006.

Source: Statistics Canada, Census of Population, 2006.

Chart 2 In communities where 80% or more of the residents are francophones, almost all of the retail and client services workers are capable of sustaining a conversation in French, 2006

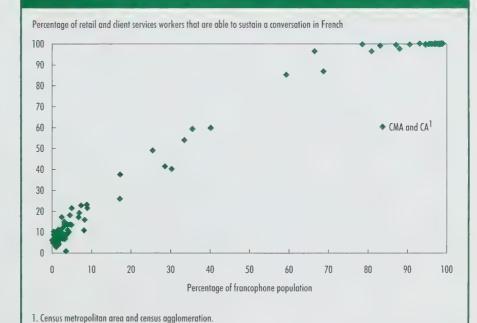


Table 1 Knowledge of French of retail and client services workers and of the total population, by province and territory, 1991 to 2006

	W	Total population			
	1991	1996	2001	2006 †	2006
			percentage		
Canada	33.2	33.0	33.0	33.0	30.7
Province or territory of work					
Newfoundland and Labrador	4.2*	4.2*	5.8*	7.5	4.7
Prince Edward Island	13.2*	15.3	15.8	17.6	10.6
Nova Scotia	11.1*	12.0	13.2	12.8	12.8
New Brunswick	44.1*	46.1*	47.1	48.3	43.6
Quebec	97.2*	97.8	98.2*	97.8	94.5
Ontario	14.5*	14.8*	14.2*	12.7	11.9
Manitoba	11.1	12.8	13.1*	11.8	9.3
Saskatchewan	5.2*	6.6	7.2	6.7	5.0
Alberta	8.7	9.4*	9.3*	8.5	6.9
British Columbia	8.3	9.5*	9.1*	8.5	7.3
Yukon Territory	11.2*	10.5*	14.5	17.4	9.1
Northwest Territories	8.3	8.2	10.0	9.5	11.8
Nunavut			6.2	5.5	4.0

t reference group

Sources: Statistics Canada, Census of Population from 1991 to 2006.

particular area may be affected by a number of factors: history, language policy, geographic location, residents' background, the prevalence of linguistically mixed unions, Frenchas-a-second-language training in local educational institutions, and so on. Not surprisingly, in areas where less than 5% of the population was francophone, less than 25% of sales and service workers were able to carry on a conversation in French.

Knowledge of French among sales and service workers is increasing in New Brunswick, Newfoundland and Labrador, Prince Edward Island and the Yukon

In Canada as a whole, the prevalence of the knowledge of French among sales and service workers remained virtually unchanged between 1991 and 2006. At the provincial level, however, there were some differences, as knowledge of French generally increased faster in most of the Atlantic provinces (Table 1). In Newfoundland and Labrador, Prince Edward Island and New Brunswick,

the proportion of sales and service workers capable of carrying on a conversation in French increased. There was a similar trend in the Yukon Territory. These variations may be due to changes in the relative number of francophones or to changes in the prevalence of the knowledge of French.

Conversely, in Ontario, the percentage of workers in these occupations who spoke French was lower in 2006 than in the three previous censuses. The situation was relatively stable in the other provinces.

The higher the proportion of francophones relative to the total population, the higher the proportion of sales and service workers who use French at work

Previous studies have shown that the higher the geographic concentration of a linguistic minority group, the greater the community's linguistic vitality. Hence, the higher the percentage of francophones in a particular community, the stronger the sense of belonging to the minority group, the greater the tendency to

consider it important to use French in everyday living and, ultimately, the more regularly French is used.

The pattern was similar for the prevalence of the use of French by workers who interact directly with the customers of businesses in a particular area: the higher the proportion of francophones in an area, the higher the proportion of the area's sales and service workers who used French most often or regularly at work.

In a number of areas, many workers know French but few use it

In almost every urban area in Quebec the proportion of workers who knew French was almost equal to the proportion of workers who used it at work. Outside Quebec, on the other hand, the proportion of workers who used French at work was lower than the proportion of workers who understood French. That is not surprising, since some of these workers were employed in markets that serve very few customers who request service in French (data not shown).

statisfically significant difference from reference group at p < 0.05

Portrait of the Moncton, Greater Sudbury, Ottawa-Gatineau and Montréal CMAs

This section examines the knowledge and use of French among sales and service workers in four CMAs and the evolution of this knowledge and use over time. In order to provide details and context, a supplementary table is presented in the appendix. Table A.1 compares the proportions of sales and service workers who know French with workers in other occupations.

Moncton CMA: Francophones make up more than one-third of the population

With 126,400 residents, the Moncton CMA is New Brunswick's most populous urban area. It had a higher proportion of francophones (36% of

the population had French as their mother tongue) in 2006 than any other urban area (CMA or CA) in Canada outside of Quebec.

In view of this demolinguistic reality, it is no surprise that the proportion of workers in Moncton who were able to converse in French was relatively high compared with the proportion in most other urban areas outside Quebec. In 2006, 59% of sales and service workers whose place of work was in the Moncton CMA knew French well enough to be able to carry on a conversation. The corresponding proportion in 2001 was 53% (Table 2).

Knowledge of French among sales and service workers varied

by district and municipality within the Moncton metropolitan area. For example, 71% of workers whose place of employment was in Dieppe knew French, compared with 58% in the municipality of Moncton (where francophones make up a smaller proportion of the population) (data now shown).

Moncton CMA: A growing proportion of sales and service workers use French at work

In 2006, just over half (51%) of Moncton's sales and service workers used French at work; this is an increase from 2001. The gain was the result of an increase in the proportion of workers who used French more

Table 2 Knowledge of French of retail and client services workers and the workers in other occupations, 1996, 2001 and 2006

	Knowledge of French						
	Retail and	client servic	es workers	0	ions		
	1996	2001	2006 †	1996	2001	2006	
			perce	ntage			
Place of work (CMA ¹)							
Moncton	54.8*	53.2*	59.1	50.8‡	53.0	55.1‡	
Greater Sudbury	41.9	43.3	41.3	40.3	40.7	41.5	
Ottawa-Gatineau	56.3*	56.6*	53.8	54.9‡	54.7‡	56.4‡	
Ottawa-Gatineau (Que.)	97.8	98.3	97.8	88.8‡	89.1‡	90.6‡	
Ottawa-Gatineau (Ont.)	45.6*	45.0*	41.1	47.8‡	47.8‡	49.2‡	
Parliament Hill	51.6	50.5	51.8	61.8‡	63.2‡	66.2‡	
Byward Market	57.0*	50.7	45.0	55.5	54.5	56.8‡	
Montréal	96.3	97.0*	96.3	93.5‡	94.2‡	94.2‡	
Suburban rings of Montréal	99.0	99.2	99.0	97.8‡	98.2‡	98.1‡	
Island of Montréal	94.5	95.4*	94.2	91.6‡	92.5‡	92.2‡	
City of Montréal (without the city centre)		96.0*	95.2		93.0‡	92.8‡	
Other municipalities on the Island of Montréal		93.2*	90.5	••	87.1‡	86.7‡	
City centre	93.9	95.0*	93.4	94.0	95.1	94.2	
East of Saint-Lourent	95.6	95.9	95.2	97.8‡	98.2‡	97.2	
Between Saint-Laurent and Peel	94.8	95.6*	93.1	94.7	95.8	94.9‡	
West of Peel	91.4	93.6	93.0	90.3	91.7‡	91.1	

[†] reference group

 $[^]st$ statistically significant difference from reference group at p < 0.05

t statistically significant difference between retail and service workers and the workers in other occupations (for the same reference year)

^{1.} Census metropolitan area.

Source: Statistics Canada, Census of Population, 1996 to 2006.

often than any other language at work (Table 3).

According to the 2006 Survey on the Vitality of Official-Language Minorities (SVOLM), 60% of the Moncton CMA's French-speaking population⁷ felt that the presence of French had increased in their municipality over the previous 10 years.

Greater Sudbury CMA: 3 in 10 are francophones

In 2006, 44,690 francophones lived in the Greater Sudbury CMA in northern Ontario, accounting for 29% of the population. "The Sudbury francophone community has deep historical roots and is rightly described as a founding community". Well-established French language media, organizations and institutions are all examples of French culture, identity and life in Sudbury.

Use of French by customers

The 2006 Survey on the Vitality of Official-Language Minorities (SVOLM) provides information about the use of French by customers. This information is a valuable addition to the census data on the use of French by workers. According to the SVOLM data, 55% of Moncton's French-speaking population used French when they spoke to the employees of the businesses they visited most often (the remainder used English only or much more often). The corresponding proportion for Ottawa-Gatineau was 38% (Ontario side only) (see "What you should know about this study", where the distinction between French-speaking population and francophones is explained).

In 2006, 41% of sales and service workers in Greater Sudbury had sufficient knowledge of French to carry on a conversation. This proportion has changed little over the previous ten years. Interestingly, francophones were not as highly represented in sales and service

occupations (25% of workers) as they were in other occupations (29%) (Table A.1).

On the other hand, the proportion of workers who used French at work remained relatively stable between 2001 and 2006 at around 30% (Table 3).

Table 3 Use of French at work by retail and client services workers, 2001 and 2006

	Use of French at work						
	Most	Most often		ularly	Т	otal	
	2001	2006 †	2001	2006 †	2001	2006 †	
			perce	entage			
Place of work (CMA1)							
Moncton	16.3*	21.4	29.8	29.2	46.1*	50.5	
Greater Sudbury	6.7	6.1	23.3	22.8	30.0	28.9	
Ottawa-Gatineau	27.3	27.2	17.6*	16.1	44.8*	43.3	
Ottawa-Gatineau (Que.)	93.1	93.2	3.2	3.8	96.2	97.0	
Ottawa-Gatineau (Ont.)	9.0	8.1	21.6*	19.7	30.6*	27.8	
Parliament Hill	12.7	9.5	29.4	30.4	42.1	39.9	
Byward Market	8.8	7.7	32.4	29.8	41.2	37.5	
Montréal	86.5*	85.5	9.3*	10.1	95.8	95.6	
Suburban rings of Montréal	97.0*	96.4	1.8	2.2	98.8	98.6	
Island of Montréal	78.8*	76.7	14.9*	16.5	93.6	93.2	
City of Montréal (without the city centre)	85.5*	83.4	9.3*	11.1	94.8	94.5	
Other municipalities on the Island of Montréal	54.7*	50.4	34.7*	37.7	89.4	88.0	
City centre	74.6	73.2	18.5	19.2	93.1	92.4	
East of Saint-Laurent	87.7	86.1	7.0	8.9	94.7	95.0	
Between Saint-Laurent and Peel	75.5	74.5	17.7	17.3	93.1	91.8	
West of Peel	67.5	65.8	24.9	26.7	92.4	92.5	

[†] reference group

Sources: Statistics Canada, Census of Population from 2001 and 2006.

statistically significant difference from reference group at p < 0.05

^{1.} Census metropolitan area.

The stability in the knowledge and use of French among sales and service workers was reflected in the perception of the status of French in this community. According to the SVOLM data, almost half of francophones in Greater Sudbury stated that the presence of French in their community had not changed in 10 years (the remainder were almost equally divided between those who thought the situation had improved and those who thought it had worsened).

Ottawa-Gatineau CMA: Two sides of the river, two very different realities for francophones

In 2006, the Ottawa-Gatineau CMA had a population of 374,200 francophones or about one-third of the total population.

The fact that there is a much higher concentration of francophones on the Quebec side than on the Ontario side has consequences for the proportion of sales and service workers on either side of the river who understand and can use French. In 2006, almost all sales and service workers whose place of employment was on the Quebec side of the Ottawa-Gatineau CMA knew French (98%). On the Ontario side, 41% of sales and service workers were able to carry on a conversation in French; for individual neighbourhoods and municipalities within the CMA, the proportion varied with the proportion of francophones in the local population. For example, 89% of sales and service workers whose place of employment was in the municipality of Rockland, which has a francophone majority, knew French.

In the area that includes Parliament Hill and downtown Ottawa, which welcomes many Canadian and foreign tourists, and is the workplace for many francophone public servants, just over half of the sales and service workers could carry on a conversation in French in 2006 (52%). The corresponding proportion was

45% for workers in the Byward Market, well known for its restaurants, public market and bars (Table 2).

Ottawa-Gatineau CMA: Knowledge of French among sales and service workers steady in Quebec, down slightly from five years ago in Ontario

On the Ouebec side of the Ottawa-Gatineau CMA, there was little change in the knowledge of French among sales and service workers between 1996 and 2006. On the Ontario side of the Ottawa-Gatineau CMA, however, the prevalence of the knowledge and use of French declined since 2001. The decrease in the prevalence of French in the Ottawa-Gatineau CMA was a major factor in the decline of the proportion of sales and service workers in Ontario who knew French.

The decline in the prevalence of knowledge of French among sales and service workers on the Ontario side of the Ottawa-Gatineau CMA is contrary to the trend in other occupations in the same area. In fact, people in occupations other than sales and service were more likely to know French in 2006 than they were in 2001 and 1996 (Table 2). This trend may be the result of two phenomena. First, the proportion of allophone sales and service workers (workers whose mother tongue was neither English nor French) increased somewhat between 2001 and 2006 (from 16% to 20%). Second, those allophone workers, in addition to being more numerous, were less likely to know French in 2006 (23%) than they were in 2001 (32%). The two patterns were not evident in other occupations (data not shown).

Ottawa-Gatineau CMA: The use of French is less common than knowledge of French on the Ontario side

Many sales and service workers on the Ontario side of the CMA were able to provide service in French but did not report doing so on a regular basis. The proportion who reported using

French at work (at least regularly) was 28%, compared with 41% who knew the language (Tables 2 and 3).

This situation may be the result of two factors. First, in some parts of the city there are few francophone residents and thus even if many retail or service employees know French, they may not use it on a regular basis.

Second, francophone customers do not always request service in French. Moreover, SVOLM data show that when French-speaking adults living on the Ontario side converse with employees of the businesses they visit most often, 62% of them stated that they used English much more often than French.¹⁰

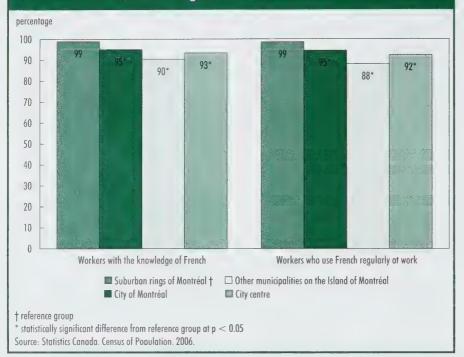
Montréal CMA: Workers in the city centre are slightly less likely to know French than workers elsewhere in the city

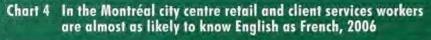
In 2006, almost all sales and service workers in the province of Quebec (98%) knew French (Table 1). In most urban areas of the province, the proportion was close to 100% (data not shown).

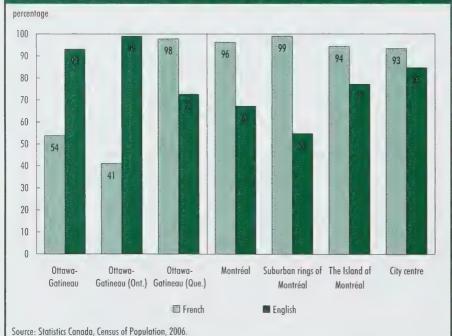
In the Montréal CMA, 96% of those with sales and service jobs knew French. Given the geographical distribution of anglophones, allophones and francophones in the Montréal CMA, the proportion of workers who knew French was higher in the suburbs (99%) than in the city of Montréal (95%) and in the municipalities located on the Island of Montréal (90%). In Montréal's city centre, 93% of workers knew French in 2006 (Chart 3). There were no statistically significant differences between the western and eastern parts of the centre (Table 2).

In other municipalities on the Island of Montréal (where francophones account for about a quarter of the population) the percentage of workers who knew French varied. As an example, in Côte-Saint-Luc, 82% of workers in sales and service could speak French. The corresponding proportions were 86% in Dollard-des-Ormeaux and 93% in Pointe-Claire (data not shown).

Chart 3 The proportion of retail and client services workers who know and use French is lower in Montréal's city centre than in the suburban rings, 2006







Montréal CMA: The proportion of workers in the city centre who knew French was relatively stable between 1996 and 2006

In the Montréal CMA, the proportion of sales and service workers who knew French in 2006 was the same as in 1996 at 96%. The situation was virtually the same in the city centre, though with a slightly larger decline in the knowledge of French between Saint-Laurent and Peel streets, where the majority of Montréal's city centre department stores, shopping centres, restaurants and bars are located. In that district, the proportion of sales and service workers who knew French was 93% in 2006, compared to 96% in 2001 (Table 2).

The decrease in the proportion of workers who knew French in that district was primarily due to the fact that a smaller percentage of the workers had French as their mother tongue. In 2006, 51% of sales and service workers in the district between Saint-Laurent and Peel streets were francophones, compared with 59% in 2001 (Table A.1). On the other hand, the propensity of allophone and anglophone workers to know French did not change appreciably between 2001 and 2006.

Profile of the workers who are most and least likely to know and use French at work in the Moncton, Greater Sudbury, Ottawa-Gatineau and Montréal CMAs

Younger workers are more likely to know French

Among anglophones outside Quebec, the level of English/French bilingualism is much higher for those aged 10 to 29 than any other age group. 11 This may be a result of the teaching of French as a second language in schools or the many French-immersion programs across the country. In Quebec, the vast majority of children whose mother tongue was neither French nor English (allophones) have been required to attend elementary and secondary

school in French since Bill 101 was passed in 1997 (Charter of the French Language). Consequently, younger sales and service workers in the four CMAs are more likely than older workers to know French (Table 4).

The difference between the youngest and oldest workers is particularly pronounced in Moncton. In 2006, 71% of Moncton's sales and service workers between the ages of 15 and 24 knew French well enough to be able to carry on a conversation, compared with 40% of those aged 55 and over.

The prevalence of the knowledge of French also varies by occupation. In the four CMAs, roughly seven out of 10 sales and service workers were employed in just three occupations: retail salespersons and sales clerks, cashiers, and food and beverage servers. In Moncton, francophones were generally more likely to be able to use French if they went to a restaurant than if they spoke to a salesperson or a sales clerk in a store.

In central Montréal, the opposite was true, though the difference was much smaller: retail salespersons

Table 4 Knowledge of French of retail and client services workers by select CMAs and characteristics, 2006

				Census	metropolit	an areas			
	Moncton	Greater cton Sudbury					Montréal		
			Total	Quebec part	Ontario part	Total	Suburban rings	Island of Montréal	City centre
					percentag	9			
Occupation									
Retail salespersons and sales clerks†	57.5	38.9	52.3	97.2	41.8	96.7	99.0	94.7	94.6
Cashiers	54.0	45.1	54.8	99.2*	39.9	96.2	99.1	93.5*	90.4*
Food and beverages servers	70.5*	39.3	58.6*	98.9*	44.8	95.7*	98.8	93.6	91.0*
Hairstylists/beauticians	69.7*	37.3	49.5	99.0	34.9*	95.7*	98.9	92.5*	91.9
Grocery clerks and store shelf stockers	44.3*	46.3	49.6	95.5	32.4*	95.9	98.6	92.5*	95.3
Other sales occupations	67.0*	46.0	58.5*	97.0	46.8*	96.7	99.4	95.7*	95.1
Age group									
15 to 24 years †	70.6	50.1	59.4	99.3	47.8	98.7	99.6	97.9	97.3
25 to 34 years	65.3*	32.6*	51.8*	96.2*	39.7*	95.4*	98.4*	93.8*	93.5*
35 to 44 years	49.4*	34.4*	48.9*	97.3*	33.4*	94.5*	98.3*	91.9*	92.2*
45 to 54 years	51.3*	40.3*	45.4*	95.7*	30.2*	94.3*	98.5*	90.9*	86.7*
55 years and more	40.3*	32.9*	45.9*	95.2*	34.2*	93.4*	98.3*	89.5*	86.3*
Mother tongue ¹									
English	34.7*	23.8*	34.4*	81.4*	32.8*	87.9*	92.4*	86.8*	87.8*
French†	99.6	98.2	99.5	99.9	98.7	100.0	100.0	100.0	100.0
Other	44.7*	6.6*	28.8*	87.4*	23.4*	87.8*	91.6*	86.9*	85.7*
Immigrant status									
Immigrant †	43.2	2.0	27.0	86.8	22.0	86.2	90.6	85.1	85.1
Non immigrant	59.6*	42.8*	59.8*	98.5*	46.5*	98.7*	99.6*	97.7*	97.5*

[†] reference group

Sources: Statistics Canada, Census of Population, 2006.

statistically significant difference from reference group at p < 0.05

^{1.} Persons whose mother tongue or one of the mother tongues is French.

and sales clerks were slightly more likely to know French (95%) than were servers in restaurants (91%) (Table 4).

Most anglophones and allophones in sales and service occupations in Quebec know French

The propensity of anglophone sales and service workers to know French varied widely by location of employment. The proportion of anglophone workers who knew French was 33% on the Ontario side of the Ottawa-Gatineau CMA, compared with 81% on the Quebec side of that CMA and 88% in the Montréal CMA.

Allophones working in Quebec were about as likely as anglophones to know French: 87% on the Quebec side of the Ottawa-Gatineau CMA. 88% in the Montréal CMA.

In the Montréal CMA, workers whose mother tongue is Chinese are less likely to know French

The proportion of allophone workers who knew French varied substantially by mother tongue in the Montréal CMA (data not shown). Workers whose mother tongue was Spanish, Arabic, Italian or Portuguese were the most likely to know French (more than 95% in all cases). In contrast, 56% of sales and service workers whose mother tongue was Chinese knew French.

Summary

The vast majority of francophones are able to obtain service in their language since most of them live in communities where French is the dominant language. Outside the province of Quebec, the level of knowledge of French in retail and service outlets varies from area to area depending on, among other things, the proportion of francophones living in the area. In the province of Quebec, in 2006, the proportion of workers who knew French was almost 100% in most CMAs. In the Montréal CMA, this proportion was 99% in the northern and southern suburbs off the Island of

Montréal, 95% in the city of Montréal and 91% in other municipalities on the Island of Montréal. In the Ottawa-Gatineau CMA, 98% of those who worked on the Quebec side could hold a conversation in French; the corresponding proportion was 41% on the Ontario side. Finally, in the two CMAs with the highest concentration of francophones outside Quebec, Moncton and Greater Sudbury, the proportions were 59% and 41% respectively.

Over time, the prevalence of the knowledge of French among sales and service workers has remained steady at the national level but varied somewhat at the provincial/territorial level—up in Newfoundland and Labrador, Prince Edward Island, New Brunswick and Yukon; slightly down in Ontario; unchanged in the other provinces and territories.

In the four CMAs analyzed in this article, the proportion of workers who knew French increased slightly in the Moncton area between 1996 and 2006 and remained relatively stable in Greater Sudbury. In the Ottawa-Gatineau CMA, it remained stable on the Quebec side of the river, but declined on the Ontario side. Over the same period, the proportion of sales and service workers who knew french remained relatively stable on the Island of Montréal, in the central area of the city, as well as in the suburbs.

In the Montréal CMA, most anglophone and allophone sales and service workers were able to carry on a conversation in French.



Martin Turcotte is a senior analyst with Canadian Social Trends, Social and Aboriginal Statistics Division, Statistics Canada.

1. In this article, persons who reported that French was one of the languages they learned first in childhood are considered francophones. A small number of respondents gave more than one answer to the question on the first language learned

- at home in childhood (for example, English and French, French and a non-official language, and so on). For the purposes of this article, any respondent who reports French as one of his or her first languages learned is deemed to be a francophone.
- Marmen L. and Delisle, S. (2003). Healthcare in French outside Quebec Canadian Social Trends. No. 11-008-X. Ottawa: Minister of Industry. See also Blaser, C. 2009. Health Care Professionals and Official-Language Minorities in Canada. Statistics Canada, Catalogue no. 91-550-X, Ottawa: Minister of Industry.
- This is the percentage according to the proportional distribution of multiple responses to the question on mother tongue. If we consider as francophones all of those who answered that French was their mother tongue or one of their mother tongues, as we did in this article, this proportion was 50.9 %.
- On the Island of Montréal, these two municipalities ranked second and third in terms of population (respectively 48,930 in Dollard-Des Ormeaux and 31,395 in Côte-Saint-Luc). In 2006, the city of Montréal reached 1,620,693 people.
- Statistics Canada. 2007. The Evolving Linguistic Portrait, 2006 Census. Catalogue no. 97-555-XIE. Ottawa: Minister of Industry.
- 6. Corbeil, J-P., Grenier, C. and Lafrenière, S. A. (2007). Minorities Speak Up: Results of the Survey on the Vitality of Official-Language Minorities. Statistics Canada, Catalogue no. 91-548-X. Ottawa: Minister of Industry.
- In the Survey on the Vitality of Official-Language Minorities, the French-speaking population is composed of persons who:
 - (a) have French as their mother tongue, alone or with another language;
 - (b) have a non-official language as their mother tongue (we refer to them as allophones) and speak French but not
 - (c) have a non-official language as their mother tongue, know both English and French and speak either a nonofficial language or French, alone or with another language, most often at home. In the rest of the study, the term used is Francophones, i.e., persons who reported French as their mother tongue (alone or, in some cases, with other languages).
- Includes 35% who used English and French equally, 14% who used French much more than English, and 5% who used French only.

- Office of the Commissioner of Official Languages. (2007). Vitality Indicators for Official Language Minority, Communities 1: Francophones in Urban Settings - The
- Sudbury Francophone Community. Catalogue no. SF31-92/1-3-2007, Minister of Public Works and Government Services Canada.
- 10. How much effort they made to obtain service in French is unknown.
- Statistics Canada. 2007. The Evolving Linguistic Portrait, 2006 Census. Catalogue no. 97-555-X. Ottawa: Minister of Industry.

Table A.1 Knowledge of French of retail and client services workers and workers in other occupations, by select CMAs, 2006

	Retail and	service workers	Workers of other occupations					
	Francophones ² †	Use French at home ³ †	Francophones ²	Use French at home ³				
	percentage							
Place of work (CMA1)								
Moncton	37.4	38.8	40.2	41.2				
Greater Sudbury	24.9	23.4	29.3*	26.9*				
Ottawa-Gatineau	31.3	34.7	33.9*	37.2*				
Ottawa-Gatineau (Que.)	86.2	93.4	74.3*	80.3*				
Ottawa-Gatineau (Ont.)	15.5	17.8	25.3*	28.0*				
Parliament Hill	19.7	22.4	36.9*	41.1*				
Byward Market	17.6	19.2	28.3*	34.3*				
Montréal	69.9	81.3	69.8	80.6*				
Suburban rings of Montréal	87.4	93.3	86.1*	92.7*				
Island of Montréal	55.9	71.7	61.8*	74.6*				
City of Montréal (without the city centre)	61.7	77.2	63.8*	76.9				
Other municipalities on the Island of Montréal	34.8	48.0	46.8*	58.9*				
City centre	51.1	70.2	65.7*	78.1*				
East of Saint-Laurent	69.9	83.9	79.5*	91.3*				
Between Saint-Laurent and Peel	50.9	70.7	68.2*	80.2*				
West of Peel	43.9	63.6	53.0*	66.7*				

[†] reference group

Source: Statistics Canada, Census of Population, 2006.

 $^{^*}$ statistically significant difference from reference group at p < 0.05

^{1.} Census metropolitan area.

^{2.} Persons whose mother tongue or one of the mother tongues is French.

^{3.} Uses French at home the most often or regularly.

Living with disability series Life satisfaction of working-age women with disabilities

by Susan Crompton

Introduction

Canadian women in their prime adult years lead busy lives: they are raising families, working outside the home, volunteering and often caring for others. However, the proportion of women with disabilities is rising, from 15.7% in 2001 to 17.7% in 2006. If prime working-age women begin to experience activity limitations due to a long-term health problem or condition, the impact on them, their families and the wider community can be far-reaching.

Governments in many countries direct their disability policies toward ensuring the full participation of persons with disabilities in all aspects of society in order to maintain or improve their sense of happiness and well-being. In Canada, the Minister of Human Resources and Skills Development has stated that the federal government's disability policy aims to provide persons with disabilities "with choices that will help them participate and succeed in their communities to improve their overall quality of life."²

Quality of life for persons with disabilities is influenced by many factors that may often interact in subtle ways. These factors can include the type and degree of disability, the ability to accomplish everyday tasks or activities, satisfaction with social

support, presence of a spouse or partner, attitude and coping skills, self-esteem and gender.^{3,4,5,6,7}

This article examines how Canadian women with disabilities aged 25 to 54 describe their level of life satisfaction across three main dimensions: daily activities, quality of relationships with family and friends, and health. Using the 2006 Participation and Activity Limitation Survey (PALS), we identify some of the elements that are associated with a greater sense of well-being. In order to focus on the social dimensions of this issue, we discuss women's satisfaction with their daily activities and the quality of their relationships first. Women's feelings about their health are addressed separately at the end of the article.

About the study population

The study population represents about 700,000 Canadian women aged 25 to 54 with disabilities. Just over 61% had physical-only disabilities—mainly chronic pain, agility or mobility difficulties—and about three-quarters of these women had more than one limitation. Fewer than 3% had a non-physical disability only, primarily a psychological condition or learning disability. About 36% had mixed disability in addition

to a physical disability. (Given their small numbers, women with only non-physical disabilities are included with the mixed disabilities population in the analysis.) On average, women with physical-only disabilities had been living with their limitation for 12.6 years, and those with mixed disabilities for 17.6 years.

Just under 43% of women in the study population described their disability as being severe or very severe. A similar proportion (44%) did not participate in all the leisure activities they would have liked to because of the limitations imposed by their condition. About 18% received help with everyday tasks like doing housework, running errands and preparing meals.

Slightly more than one-half of the study population (53%) was between 45 and 54 years of age, with an average age of 43. Over onethird (35%) lived with a spouse and children, one-quarter (25%) lived with a spouse only, and 15% were lone parents. The remaining 25% had another type of living arrangement, and were living by themselves, with their parent(s) or with other people. Three-quarters (75%) had not completed postsecondary education, and 55% reported household income of less than \$60,000 a year. Just over one-half (51%) had paid jobs outside

What you should know about this study

This article draws on results of the 2006 Participation and Activity Limitation Survey. The study population comprises just over 4,100 respondents representing about 700,000 women with disabilities aged 25 to 54. Respondents were classified as having a disability if they reported that they had difficulties with daily living activities, or that a physical or mental condition or health problem reduced the kind or amount of activities they could do. The answers to the disability questions are self-reported and therefore represent the respondent's perception of her situation. PALS did not collect data from individuals without disabilities and so it is not possible to compare the study population with its non-disabled counterpart.

Definitions of terms and concepts

Type and effects of disability: this category includes information about the type of disability, the degree of severity of the disability, whether an individual receives care, and whether a woman with a disability is restricted in her leisure time activities.

Physical disabilities: includes hearing; seeing; mobility; agility; chronic physical conditions, including asthma and allergies, heart condition or disease, kidney disease, cancer, diabetes, epilepsy, cerebral palsy, spina bifida, muscular dystrophy, migraines, arthritis or rheumatism, paralysis of any sort, missing limbs or digits, complex medical care, other not specified.

Non-physical disabilities: includes speech/communication; learning; developmental; emotional/psychological; chronic non-physical conditions, including autism, fetal alcohol syndrome, ADD or ADHD, and Down syndrome.

Mixed disabilities: includes both physical and non-physical disabilities. In the analysis, this category includes the 3% of women with only non-physical disabilities who were too few to be studied separately.

Severity of disability: PALS constructed a scale measuring the overall severity of disability according to the intensity and frequency of the activity limitations reported by respondents. The disability severity scale is divided into four levels: mild, moderate, severe and very severe.

Receiving care: a woman gets help from someone else to prepare meals, do everyday housework, go to appointments, move around the house, and/or help with personal care, child care, or specialized nursing.

Non-participation in leisure activities: due to her condition, a woman does not participate in all the leisure activities she would like to.

Work and life stress: this category measures the effect of employment status and selected causes of stress.

Socio-demographics: this category measures the effect of age, education, household income, and living arrangements. **Social contact:** this category measures the effect of a woman's involvement with people outside her household. It includes volunteer work done for organizations, number of close friends she can confide in, and frequency of contact with family and friends.

Life satisfaction indices

Respondents were asked to rate their level of satisfaction with five aspects of life. In order to reduce these questions to a more manageable number, we conducted a factor analysis that identified the questions that were most closely related and could be grouped into three general themes.² Each index uses a scale of 1 to 10, where 1 is "very dissatisfied" and 10 is "very satisfied." The three life satisfaction indices are: **Daily activities:** satisfaction with job or with main activity (can include caring for children, looking after the home, going to school, being retired, and so on); satisfaction with the way leisure time is spent.

Relationships: satisfaction with relationship with family; satisfaction with relationship with friends.

Health: satisfaction with health.

The models

We used linear regression models for each satisfaction index, with the index score as the dependent variable (minimum=1, maximum=10). Coefficients were estimated through a weighted regression that used the PALS survey weights, with variance estimation calculated by survey bootstrapping. Coefficients are unstandardized; statistical significance was calculated at p < 0.05. (See Definitions of terms and concepts or Table 1 for the complete list of variables in the models.)

What you should know about this study (continued)

- I A 2003 U.S. study concluded that women with disabilities have lower self-esteem and higher social isolation than women without disabilities. (Nosek, M.A., Hughes, R.B., Swedlund, N., Taylor, H.B., and Swank, P. (2003). Self-esteem and women with disabilities. Social Science and Medicine. 56: 1737-1747.). A recent Dutch study found that although persons with disabilities had lower results on quality of life measures for perceived physical health, there was little difference between people with and without disabilities
- on measures of mental health and happiness. (Van Campen, C. and ledema, J. (2007). Are persons with physical disabilities who participate in society healthier and happier? Structural equation modelling of objective participation and subjective well-being. Quality of Life Research. 16, 4: 635-645).
- 2 Although the health satisfaction question was related to the two questions included in the daily activities index, it was retained as an independent index because of its importance for women with disabilities.

the home. Most (84%) reported experiencing some stress in their lives, mainly because of their health or their work.

Three dimensions of life satisfaction are rated very differently

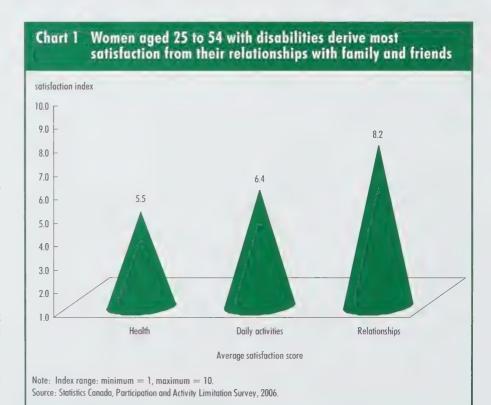
When working-age women with disabilities were asked to rate how satisfied they felt with their lives, the results were not unexpected. Half of them (50%) rated satisfaction with their health at 5.0 or more, for an average score of 5.5 out of 10. Almost 6 in 10 (58%) ranked satisfaction with their daily activities at at least 6.0. producing an average score of 6.4. They derived the greatest satisfaction from their relationships with family and friends, with 54% giving this dimension of their lives at least 8.0 out of 10, for an average score of 8.2 (Chart 1).

However, these overall averages mask the differences between women with disparate characteristics. For example, women with a severeto-very-severe degree of disability had a significantly lower life satisfaction average for daily activities than women with mild-tomoderate disability (5.3 versus 7.1). Similarly, women whose condition prevented them from participating in their preferred leisure activities also recorded lower averages (5.6 versus 7.1). And women with mixed disabilities reported less enjoyment of family and friends, with an average rating of 7.6 for relationship satisfaction, compared with 8.5 for women with physical-only disabilities (Table A.1).

Clearly, some working-age women with disabilities derived less satisfaction from their daily activities and their relationships than others, but what factors may account for these differences? Does a woman have a lower score because she has non-physical disabilities, or because her leisure time activities are limited? And since previous research suggests that life satisfaction is also related to

factors like employment and social support, what role may they play in the well-being of working-age women with disabilities?

To isolate the influence of different factors on the scores for each life satisfaction index, we developed multiple regression models. This allows us to see how individual factors contribute to the variation in women's index scores. In the remainder of this article, only the results of the regression models are reported. (See "What you should know



about this study" for details on the models.)

The type and effects of disability have the largest impact on satisfaction

Generally speaking, it is not a person's condition that causes the most difficulty, but the circumstances arising from it. Being able to adapt effectively and learning practical coping skills for dealing with everyday tasks are generally associated with better quality of life.^{8,9,10}

According to the 2006 PALS, satisfaction with daily activities is strongly associated with the type and effects of disability. In fact, these disability characteristics account for about two-thirds of the difference in women's satisfaction scores on the index for daily activities. 11 Women with severe-to-very severe disabilities had a significantly lower satisfaction score (-1.1) than those with a mildto-moderate degree of severity. Having mixed rather than physicalonly disabilities was also negatively associated with satisfaction (-0.6), even when factors including severity were taken into account. Being unable to participate in her preferred leisure activities also reduced a woman's level of satisfaction with her daily activities (Model 1, Table 1).

When it comes to satisfaction with relationships, type of disability is significantly associated with index scores, but its effect varies depending on the degree of severity. 12 Physicalonly disabilities did not change satisfaction scores regardless of severity; however, mixed disabilities were associated with significantly lower scores for both mild-tomoderate and severe-to-very severe degrees of disability (Model 2, Table 1).

Employment and stress have significant impact on satisfaction scores

Because paid employment provides social contact and a daily routine in addition to income, research generally finds a positive association between work and quality of life. 13,14. The results for the daily activities index support these earlier findings, with about one-fifth of differences in women's scores attributable to work and life stressors (Model 1, Table 1).

When a woman with disabilities has paid employment, it significantly improves her score on the index for satisfaction with daily activities. The actual magnitude of the increase. however, depends on the severity of her disability. If they were not working, women with severe-to-very severe disabilities had significantly lower satisfaction scores (-1.1) than those with mild-to-moderate limitations, however, women who were employed had significantly higher scores regardless of their degree of severity.

The positive influence of paid employment is neutralized by the impact of stress. Worrying about issues such as health, work or finances reduced index scores by 0.6 to 1.1 points out of 10, depending on the main source of stress.

Although the workplace may provide social interaction for women with disabilities, employment status was not significantly associated with satisfaction scores on the relationship index. On the other hand, life stressors had a negative effect. When all other variables were held constant, satisfaction with relationships dropped for women who were worried about family, finances or work (Model 2, Table 1).

Socio-demographic factors not important to satisfaction with daily activities¹⁵

Having postsecondary education, higher income and being married are generally associated with better confidence and sense of self-worth, both of which tend to lead to a greater sense of wellbeing. 16,17 However, these basic socio-demographic characteristics were not significantly associated with satisfaction scores on the index for daily activities, even after controlling for the influence of other variables (Model 1, Table 1).

In comparison, relationship satisfaction was higher for women living with a spouse and children (+0.3), compared to those not living with a partner or children. Interestingly, living with a spouse only or with children only did not influence women's index scores. 18

Social contact improves satisfaction with both relationships and daily

Having more friends and relatives generally makes people happier, and they are happier still when they have a larger social network. 19 The PALS models show that social contact accounts for over one-fifth of the differences in women's scores on the relationship index and for about onetenth on the daily activities index.

All other factors being held constant, women had higher satisfaction scores for daily activities if they had more than two close friends in whom to confide (+0.5): if they visited family or friends frequently (+0.4); and if they did unpaid volunteer work for organizations (+0.3) (Model 1, Table 1).

Satisfaction scores for the relationships index also significantly improved when women had good friends (+0.4) and spent time visiting with friends and family (+0.3). After controlling for other variables, though, volunteer work was not significantly associated with higher scores on the relationship index.

Extent of disability effects primarily associated with health satisfaction

The health satisfaction of working-age women with disabilities is strongly related to the impairment and its effect on everyday life. Compared to women with mild-to-moderate disabilities, those with severe or very severe disabilities rated their health satisfaction significantly lower (-1.1) once all other factors were controlled for. Being unable to participate in her preferred leisure activities

reduced a woman's index score by a similar amount (-1.1). Having mixed disabilities and receiving help with everyday activities also had a negative association. Together, these four factors accounted for about 80% of the differences in women's scores on the health satisfaction index²⁰ (Model 3, Table 1).

Only three other factors in the regression model were significantly associated with health satisfaction.

Anxiety about their health had an important influence, as women who identified health as their main cause of stress had lower scores than women who reported no stress (-1.4). On the other hand, having a paid job produced higher index scores (+0.5) once all other factors had been controlled for. And living with a spouse and children also improved women's health satisfaction scores (+0.3).

Summary

Women with disabilities aged 25 to 54 expressed a very high degree of satisfaction with the quality of their relationships with family and friends. They reported receiving less satisfaction from their daily activities and the least amount from their health status.

The effects of disability have the largest influence on women's sense of well-being. The severity of

Table 1 Regression models for satisfaction scores, women with disabilities aged 25 to 54

	Model 1 Daily activities	Model 2 Relationships	Model 3 Health		Model 1 Daily activities	Model 2 Relationships	Model : Health
coefficients			coefficients				
Intercept (constant)	7.30	8.14	6.60	Living arrangement			
Effects of disability				With spouse and			
Severity of disability				children	0.23	0.32*	0.30*
Mild to moderate †	**			With spouse only	0.08	-0.05	0.12
Severe to very severe	-1.07*	0.06	-1.07*	With children only	-0.14	0.23	0.16
Type of disability				Other, including alone,			
Physical only †				with parents †			
Mixed	-0.58*	-0.44*	-0.32*	Postsecondary educa	tion		
Receive help due to	lisability			Yes	-0.06	-0.20	0.00
Yes	-0.21	-0.08	-0.48*	No †		**	
No †	**	**		Household income			
Condition prevents p	articipation in m	ore leisure activ	rities	Under \$60,000 †			
Yes	-0.82*	-0.16	-1.08*	\$60,000 to \$89,999	-0.15	-0.12	-0.05
No t				\$90,000 or more	-0.08	-0.07	-0.07
Work and life stressors Works in paid emplo				Social contact Volunteer in an orga	nization		
Yes	0.49*	0.07	0.51*	Yes	0.33*	0.13	0.15
No t				No t			
Major cause of stress in life			Number of close friends to confide in				
Little or no stress †	4.5			Less than 3 †			
Work	-0.97*	-0.39*	-0.28	3 or more	0.47*	0.44*	0.26
Finances	-0.66*	-0.52*	-0.51	Phone contact with f		0.11	0.20
Family	-0.58*	-0.82*	-0.11	Every day	-0.04	0.20	-0.07
Health	-1.08*	-0.14	-1.43*	Less than every day †			
Other, including school	-0.86*	-0.20	-0.46	Visits with family or	friends		
Socio-demographic che		-0.20	-0.40	At least once a week	0.38*	0.30*	0.31
Age group	uracieristics			Less than once a week t			
25 to 34 †				Interaction effects			
35 to 44	-0.23	-0.07	-0.10	Mixed disabilities x			
	-0.23	0.15	-0.10	Severe to very severe		-0.55*	
45 to 54	-0.27	0.15	-0.33	Employed x Severe to		0.55	
				very severe	0.85*		

[†] reference group

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

 $^{^{*}}$ statistically significant difference from reference group at p < 0.05

disability and being prevented from participating in leisure activities diminished their satisfaction with daily activities and health; the type of disability was negatively associated with the quality of their relationships.

Stress also reduced life satisfaction. Being worried about their health was an important influence on health and daily activities; problems with family and finances also reduced satisfaction with daily activities and with relationships.

Nevertheless, a number of factors had a positive impact on women's life satisfaction scores. Having paid employment significantly improved women's feelings about their health and daily activities. Living with a spouse and children was also positively associated with higher satisfaction on both the relationship and health indices.

Social contact had a significant influence on the well-being of working-age women with disabilities. Having at least three close friends and visiting frequently with family and friends raised satisfaction with daily activities and relationships, while women who did volunteer work also felt better about their daily activities.



Susan Crompton is a senior analyst with Canadian Social Trends, Social and Aboriginal Statistics Division.

 Van Campen, C. and ledema, J. (2007). Are persons with physical disabilities who participate in society healthier and happier? Structural equation modelling of objective participation and subjective well-being. Quality of Life Research. 16, 4: 635-645.

- Hon. Diane Finley. (2009). Advancing the Inclusion of People with Disabilities 2009. Message from the Minister. Ottawa: Human Resources and Skills Development Canada. p. i.
- 3. Miller, A. and Dishon, S. (2006). Health-related quality of life in multiple sclerosis: The impact of disability, gender and employment status. Quality of Life Research. 15, 2: 259-271.
- Friedman, L.C., Brown, A.E., Romero, C., Dulay, M.F., Peterson, L.E., Wehrman, P., Whisnand, D.J., Laufman, L. and Lomax, J. (2005). Depressed mood and social support as predictors of quality of life in women receiving home health care. Quality of Life Research. 14, 8: 1925-1929.
- Moin, V., Duvdevany, H. and Mazor, D. (2009). Sexual identity, body image and life satisfaction among women with and without physical disability. Sexuality and Disability: A Journal Devoted to the Psychological and Medical Aspects of Sexuality in Rehabilitation and Community Settings. 10.1007/s11195-009-9112-5.
- Goretti, B., Portaccio, E., Zipoli, V., Hakiki, B., Siracusa, G., Sorbi, S., and Amato, M.P. (2009). Coping strategies, psychological variables and their relationship with quality of life in multiple sclerosis. Neurological Science. 30: 15-20.
- 7. Tam, S-F., Man, D.W.K., Li, E.P-Y., and Ng, J.Y.Y. (2004). Exploring self-esteem as subjective quality of life of people with different disability types. Quality of Life Research. 13, 9: 1543.
- Nosek, M.A., Hughes, R.B., Swedlund, N., Taylor, H.B. and Swank, P. (2003). Selfesteem and women with disabilities. Social Science and Medicine. 56: 1737-1747.
- 9. Goretti et al. (2009).

- Hallberg, L.R.-M., Hallberg, U. and Kramer, S.E. (2007). Self-reported hearing difficulties, communication strategies and psychological general well-being (quality of life) in patients with acquired hearing impairment. Disability and Rehabilitation. 30,3: 203-212.
- 11. The block of variables measuring the effects of disability account for 68% of the differences in scores for the daily activities index (R-squared=0.31). Results of nested regressions (not shown).
- 12. The effects of the disability block of variables contributed about 50% to the differences observed in women's scores on the relationship index (R-squared=0.16). Results of nested regression (not shown.)
- Twork, S., Wirtz, M., Schipper, S., Klewer, J., Bergmann, A. and Kugler, J. (2007). Chronical illness and maternity: life conditions, quality of life and coping in women with multiple sclerosis. Quality of Life Research. 16: 1587-1594.
- 14. Miller and Dishon (2006).
- 15. Socio-demographic characteristics account for 10% of differences in relationship scores, and less than 2% of differences in daily activities scores. Results of nested regressions (not shown).
- 16. Wilkinson, R. and Pickett.K. (2009). The Spirit Level: Why More Equal Societies Almost Always Do Better. London: Penguin Group. Pages 31-45, 63-72.
- 17. Nosek et al. (2003).
- 18. A recent study of women with disabilities found that living with a partner improved their life satisfaction only if sexual satisfaction was higher. Moin, Duvdevany and Mazor (2009).
- Christakis, N.A. and Fowler, J.H. (2009).
 Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives. New York. Little, Brown and Company. 33-60.
- 20. The block of variables comprising the effects of disability accounts for 80% of the differences in scores for the health satisfaction index (R-squared=0.35). Results of nested regressions (not shown.)

Table A.1 Average life satisfaction score for women with disabilities aged 25 to 54, 2006

	Daily activities	Relationships	Health	Da	ily activities	Relationships	Health
	average	score (maximun	1 = 10)		average	score (maximu	m = 10)
Overall average	6.4	8.2	5.5	Living arrangement			
Effects of disability				With spouse and children	6.6	8.5*	5.8
Severity of disability				With spouse only	6.4	8.2	5.5
Mild to moderate †	7.1	8.5	6.5	With children only	6.1	7.7	5.4
Severe to very severe	5.3*	7.8*	4.1*	Other arrangement,			
Type of disability				including alone †	6.3	8.0	5.2
Physical only †	6.9	8.5	6.0	Postsecondary education			
Mixed	5.7*	7.6*	4.8*	Yes	6.5	8.2	5.7
Receive help due to a	lisability			No †	6.4	8.2	5.4
Yes	6.1	8.1	5.0*	Household income			
No †	6.5	8.2	5.6	Under \$60,000 †	6.3	8.0	5.4
Condition prevents p	articipation in m	ore leisure activ		\$60,000 to \$89,999	6.5	8.4*	5.7
Yes	5.6*	8.0*	4.4*	\$90,000 or more	6.6	8.4	5.7
No †	7.1	8.4	6.4	Social contact			
Work and life stressors				Volunteer in an organiza	ition		
Works in paid emplo				Yes	6.8*	8.4	5.9*
Yes	7.0*	8.3	6.2*	No †	6.1	8.1	5.3
No †	5.7	8.0	4.8	Number of close friends	to confide in		
Major cause of stress	in life			Less than 3 †	5.7	7.7	5.0
Little or no stress †	7.3	8.7	6.3	3 to 5	6.5*	8.1*	5.6*
Work	6.8	8.3	6.4	More than 5	6.9*	8.8*	5.9*
Finances	6.3*	7.8*	5.4*	Phone contact with fami	ly or friends		
Family	6.8	7.8*	6.1	Every day	6.5	8.4*	5.6
Health	5.1*	8.1*	3.7*	Less than every day †	6.3	7.9	5.5
Other, including school	6.3*	8.3	5.6	Visits with family or frie			
Socio-demographic che	aracteristics			At least once a week	6.8*	8.4*	5.9*
Age group				Less than once a week †	6.0	8.0	5.1
25 to 34 years old †	6.9	8.1	6.1	200 11011 01120 0 110011			
35 to 44 years old	6.4*	8.1	5.7				
45 to 54 years old	6.3*	8.3	5.3*				

† reference group * statistically significant difference from reference group at p < 0.05 Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

Precautions taken to avoid victimization: A gender perspective

by Leslie-Anne Keown

Introduction

While the vast majority of Canadians are satisfied with their personal safety from crime (94%), many take precautions to protect themselves from becoming a victim of crime and some experience fear of crime. Past research has shown that fear of crime and use of precautions are not equal between men and women nor used equally among all age groups. 2,3,4 Additionally, it is likely that perceptions and fear of crime, as well as the use of precautions to avoid becoming a victim of crime differ between those living in urban and rural areas^{5,6} and even between those living in urban areas of different sizes.7.8

Using the 2004 General Social Survey (GSS) on criminal victimization, this study examines differences in perceptions of crime, fear of crime and use of precautionary behaviours to avoid victimization for the prime workingage population (25 to 54 years) living in Census Metropolitan Areas (CMAs) in Canada (For concepts and definitions see "What you should know about this study").9 Perceptions considered include perceptions of neighbourhood crime and measures of fear of crime. Precautions taken to avoid victimization include behaviours that limit some forms of day-to-day activity. These include staying home at night to avoid being a victim of crime (avoidance) and habitual behaviours which are engaged in to reduce exposure to crime and thus limit the possibility of victimization, for example, locking car doors (routine precautions).

The GSS also asks respondents about their use of lifetime protective measures such as installing new locks or burglar alarms and getting a dog for protection. Previous research has noted that there are differences

What you should know about this study

This article is based on data collected by the 2004 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. The information was collected in 2004 through Cycle 18 of the General Social Survey (GSS) on victimization. This cycle collected information on Canadians' experience of victimization and public attitudes towards crime, police, courts, prison and parole. The target population of the 2004 GSS included all people aged 15 and over, except full-time residents of the Yukon, Nunavut and the Northwest Territories. Data were collected each month from January to December 2004. Over this period, approximately 24,000 individuals were successfully interviewed.

CMA: Census Metropolitan Area. A CMA is an area consisting of one or more adjacent municipalities situated around a major urban core. A CMA must have a population of at least 100,000 and the urban core must have a population of at least 50,000. The CMAs represented here are based on geography in the 2001 Census. The CMAs included were St. John's, Halifax, Saint John, Chicoutimi-Jonquière, Québec, Sherbrooke, Trois-Rivières, Montréal, Ottawa-Hull, Kingston, Oshawa, Toronto, Hamilton, St. Catharines-Niagara, Kitchener, London, Windsor, Greater Sudbury, Thunder Bay, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Abbotsford, Vancouver and Victoria.

This article examines only respondents who resided in CMAs and were of the core working age (25 to 54). This resulted in a sample of 8,095 respondents representing approximately 9.6 million Canadians.

between men and women in the use of lifetime protective measures, but these are less pronounced than the gender differences seen in precautions that limit some forms of day-to-day activity. ¹⁰ This is likely because lifetime measures are more focused on activities related to household experiences than on an individual's action.

More specifically, this article focuses on determining whether there are differences in the perceptions of fear of crime and the use of precaution measures between men and women in the study population, and examines whether any differences persist once other factors (including fear of crime and perceptions of the presence of crime) that may influence the use of precautions have been taken into account.

The study population

The study population in this group consists of the core workingage population (those between the ages of 25 and 54)¹¹ living in CMAs. This results in a sample of 8,095 people representing approximately 4.8 million women and 4.8 million men living in Canada.

The age group for this study was chosen because it represents a significant portion of the population and this age group may exhibit different fear of crime and perceptions than young adults or older individuals. For example, the core working-age population (25 to 54) was less likely to have experienced victimization in the last 12 months than their younger counterparts (31% versus 43%). However, they were more likely to have self-reported victimization than their older counterparts (31% versus 14%). The working-age population was also less likely than older Canadians to have used a precaution to protect themselves from victimization (data not shown).

Different patterns are also seen when those residing in CMAs are compared to those living elsewhere (See "CMA versus non-CMA" for

CMA versus non-CMA

How do those residing in CMAs differ in perception of crime, fear of crime and use of precautions to avoid victimization from those living outside CMAs?

There are considerable differences between individuals of the core working age (25 to 54 years) residing in CMAs and those residing outside CMAs with respect to perceptions of neighbourhood crime, fear of crime, and use of precautionary behaviours that limit day-to-day activity.

In 2004, those residing in CMAs were more likely to have experienced victimization (33%) than those residing outside CMAs (27%). They were also more likely to report that crime is higher in their neighbourhood compared to other neighbourhoods and to believe that crime in their neighbourhood had increased in the last five years.

Those residing in CMAs were also more likely to report fear of crime. For example, 15% of those residing in CMAs reported feeling unsafe walking alone at night in their neighbourhood compared to 9% among those living outside CMAs. Those residing in CMAs also reported higher levels of worry when they were home alone (22%) than those residing outside CMAs (16%).

With regard to the use of precautionary behaviours, those living in CMAs were more likely to use more precautionary behaviours. About 10% of those residing in CMAs stated they used an avoidance precaution (staying home) and 77% reported using at least one routine precaution. For those residing outside CMAs, 6% reported using an avoidance precaution and 66% reported using at least one routine precaution.

details). For these reasons, this article focuses on the core working-age population of Canadians living in CMAs.

Do men and women differ in their perception of the amount of crime around them?

Before examining the specific precautions taken to avoid becoming a victim of crime, it is necessary to first examine whether men and women differ in the amount of crime they perceive around them. For example, if their perception of crime differs, then it might be expected that men and women would react differently to crime, with the group perceiving more crime reacting more strongly (either with regard to fear or precautionary behaviours). ^{12,13,14,15} However, there is only a slight difference in how the

sexes perceive the amount of crime around them (Table 1).

In 2004, 35% of women and 32% of men perceived that crime in their neighbourhood had increased in the last five years. This three percentage point difference is statistically significant but relatively small. Men and women did not differ about whether they believed that crime in their neighbourhood was higher when compared to other neighbourhoods, with just over 1 in 10 saying that crime in their neighbourhood was higher than in other neighbourhoods.

Do men and women differ in their fear of perceived crime?

Although men and women did not differ substantially in how much crime they perceived; there were significant differences between men and women

Table 1 Perceptions of crime among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Neighbourhood crime is higher compared to other neighbourhoods in Canada	11	11	12	0.92
Crime in your neighbourhood has increased in the last 5 years	33	35	32	1.16*

 $^{^{\}star}$ statistically significant difference between men and women at p < 0.05 Source: Statistics Canada, General Social Survey, 2004.

Table 2 Perceptions of personal safety among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Feel somewhat or very unsafe walking alone after dark	15	24	7*	4.23*
Somewhat or very worried when home alone in the evening	22	30	15*	2.49*

 $^{^{\}star}$ statistically significant difference between men and women at p <0.05 Source: Statistics Canada, General Social Survey, 2004.

with respect to their fear of crime (Table 2). It is evident from the data that women were more fearful than men. In 2004, 24% of women of core working age living in CMAs said they felt somewhat unsafe or very unsafe walking alone after dark. In contrast, only 7% of men felt this way. Stated another way, the odds of a woman feeling unsafe walking alone after dark were 4.2 times higher than those of a man.

Another measure of fear is whether a person feels worried when home alone. Again, differences between the sexes are marked: twice as many women (30%) as men (15%) were somewhat or very worried when home alone in the evening.

Do men and women differ in their avoidance behaviours?

While women and men had similar feelings about their sense of neighbourhood crime, fear responses

varied significantly between the sexes. This same pattern of large differences between men and women is also seen when their use of precautions taken to avoid victimization, which can limit day-today activity, is examined. One type of precautionary practice is avoidance behaviour. Avoidance behaviour reflects the restrictions individuals place on their own movements in order to protect themselves from crime. 16,17,18,19 This restriction of activity has important societal consequences because it limits personal freedom and also because it can change urban interactions and patterns of mobility in, for example, public places like shopping areas and community gathering places.²⁰

The GSS measures avoidance behaviours by asking whether individuals stay home at night because they are afraid to go out alone. While only 3% of men in the study population avoided going out alone at night, 17% of women engaged in this behaviour as a means to avoid becoming a victim of crime (Chart 1). In other words, the odds of a woman between the ages of 25 and 54 practicing avoidance behaviour to protect herself from crime were 7.0 times higher than that of a man in the same age group.

Therefore, while it appears that men and women largely agree on the amount of crime they perceive in their neighbourhoods, there are large differences between the sexes in their fear of crime. Not surprisingly then, there are important differences for men and women in their avoidance behaviour.

Do men and women differ in the routine precautions taken to avoid being a victim of crime?

In addition to avoidance behaviours, precautions that limit day-to-day activity can involve behaviours adopted habitually to protect oneself from becoming a victim, usually when away from home.²¹ These are called routine precautions. Similar to avoidance behaviours, the use of routine precautions can have an impact on personal freedom but, perhaps more importantly, they serve to protect the individual.

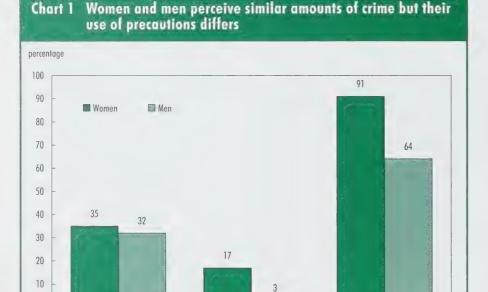
The GSS asked respondents if they used four routine precautions. As was the case with avoidance as a precautionary behaviour, women were much more likely than men to use routine precautions. Indeed, the odds of a woman using a routine precaution were 5.7 times higher than the odds of a man. In other words, among those aged 25 to 54 living in CMAs, 91% of women used at least one routine precaution compared to 64% of men (Table 3).

Gender differences were also found in each of the four separate behaviours. The least common precautionary behaviour for both men and women was carrying something for self-defence, with 21% of women and 8% of men reporting that they routinely engaged in this activity. And

Table 3 Routine precautions taken to avoid victimization among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Used any of the routine precautions below	77	91	64*	5.73*
Carried something to defend yourself or alert other people	14	21	8*	3.05*
Locked the car doors for personal safety when alone in the car	62	80	44*	4.98*
Checked the back seat for intruders when alone and returning to your car	47	64	31*	4.03*
Planned your route with safety in mind	47	60	34*	2.98*

statistically significant difference between men and women at p < 0.05Source: Statistics Canada, General Social Survey, 2004.



Avoidance precautions

Source: Statistics Canada, General Social Survey, 2004.

Crime in your neighbourhood has

increased in the last 5 years

while about 60% of women planned their route with safety in mind, this was the case for 34% of men. Women were also much more likely than men to use car-related precautionary behaviours. For example, women were 4 to 5 times more likely than men to lock their car doors and to check the back seat of their vehicle when alone.

The 2004 General Social Survey data indicate that there are important differences between men and women with respect to the avoidance and routine precautionary behaviours they used to protect themselves from victimization and to help with fear of crime, while there are no substantive differences in neighbourhood crime

Routine precautions

perceptions (Chart 1). However, it is possible that part of the gender difference in precautionary behaviours could be explained by other influences such as age, income, education, fear, and crime perceptions. The following section examines these intervening factors.

Do gender differences in precautionary behaviours remain once other factors are taken into account?

In order to understand whether gender differences remain important once other characteristics and factors have been accounted for, logistic regression was used. In logistic regression models, it is possible to see what unique contribution each factor makes toward understanding precautionary behaviours while controlling or removing the influence of other variables. Avoidance behaviours and routine precaution behaviours are examined in separate models.^{22,23}

Past research has found that a number of other influences may explain differences in precautionary or avoidance behaviours between women and men. 24,25,26 These influences include demographic characteristics such as age, education and income, as well as neighbourhood perceptions of crime, perceptions of fear, and victimization experiences (See "Does victimization influence precaution use?" for details).

The model developed here shows that while many of these other influences were important (for example, perceptions of crime and fear, visible minority status, and whether people owned their dwellings), they did not reduce the influence of gender (Table 4). Examining avoidance behaviours by controlling for sex alone shows that the odds of a woman in the study population engaging in avoidance behaviour (staying home at night) were 7.0 times higher than the odds of a man. Even when other influences are added to the model, the odds ratio remains significantly

0

Chart 1

Does victimization influence precaution use?

Past research has shown that precaution use and criminal victimization may be linked. This leads to the question of whether there are differences between men and women with respect to the relationship between precaution use and victimization. Men and women aged 25 to 54 residing in CMAs did not differ in self-reported victimization. The 2004 GSS found that one in three individuals had reported some form of victimization (including victimization by a spouse or ex-spouse) in the last 12 months. Further details on victimization can be found in the Juristat entitled "Criminal victimization in Canada, 2004" by Gannon and Mihorean (2005), Statistics Canada Catalogue no. 85-002-XPE, Vol. 25. no. 7.

The overall model results indicate that there is a relationship between self-reported victimization and routine precaution use. Those who reported victimization were 1.3 times more likely to report using a routine precaution than those who reported no victimization in the last 12 months. There was no relationship between using an avoidance precaution (staying at home) and victimization once other factors were controlled for. However, there was no indication that the influence of self-reported victimization on precaution use was different for men and women (See Table A.1 for model results).

 Gannon, M. and Taylor-Butts, A. (2006). Canadians' Use of Crime Prevention Measures. Statistics Canada Catalogue no. 85F0033MIE – No. 12.
 AuCoin, K. and Beauchamp, D. (2007). Impacts and consequences of victimization,

GSS 2004. Juristat. Statistics Canada Catalogue no. 85-002-XIE, Vol. 27, no. 1.

2. Respondents reported what precaution and avoidance behaviours they used but did not indicate whether these measures were implemented before or after their victimization.

Table 4 Comparison of odds ratios for gender and precaution use

	Odds of women compared to men				
	odds ratio unadjusted	odds ratio adjusted			
Avoidance behaviour	7.0	6.8			
Routine precautions	5.7	5.5			

 * statistically significant difference between unadjusted and adjusted odds ratio at p < 0.05 Note: Full model results are presented in Table A.1. Source: Statistics Canada, General Social Survey, 2004.

higher for women than for men. Even after controlling for other confounding influences, women aged 25 to 54 living in CMAs were 6.8 times more likely to engage in avoidance behaviours than their male counterparts.

A similar picture is seen when routine precautions are considered. The odds of a woman using a routine precaution were 5.7 times higher than the odds of a man when no other influences were taken into account. When the model was used to

control for other influences, women continued to have significantly higher odds of engaging in routine precautionary measures compared to men, and the influence of gender was not significantly changed by controlling for other factors in the model.

These results illustrate that even after other influences have been controlled for, gender remains an important element in explaining the differences in precautionary behaviours that limit forms of day-to-day activity. Research suggests the gender difference in precautionary behaviours persists because women feel more vulnerable than men when they are away from their place of residence. ^{27,28,29,30,31,32,33}

Summary

This article has shown that men and women between the ages of 25 and 54 and living in CMAs differ in their use of precautionary behaviours to protect themselves from victimization. These precautionary behaviours often limit some form of their day-to-day activities. While women and men generally perceive the same amount of crime around them, their use of precautionary behaviours is very different. Women were much more likely than men to be fearful of crime and engage in precautionary behaviours including avoidance behaviours and taking routine precautions. This gender gap was persistent and remained substantially unchanged even when a variety of other characteristics including fear of crime were taken into account.



Leslie-Anne Keown is a social science researcher with Canadian Social Trends.

- Gannon, M. (2005). General Social Survey on Victimization, Cycle 18: An Overview of the Findings. Statistics Canada Catalogue no. 85-565-XIE.
- 2. Ibid.

- 3. Gannon, M. and Taylor-Butts, A. (2006). Canadians' Use of Crime Prevention Measures. Statistics Canada Catalogue no: 85F0033MIE - No. 12.
- 4. Keown, L.A. (2007a). Personal Crime Precautions in Canada (1993-2004): An Exploration. Unpublished Doctoral Dissertation. University of Calgary. Calgary, Alberta.
- Gannon, M. (2005).
- 6. Gannon, M. and Taylor-Butts, A. (2006).
- Keown, L.A. (2007b). Incorporating Place into Research: An Example Using Personal Crime Precautions in Canada. Statistics Canada Socio-Economic Conference. Ottawa, ON. May 28.
- Keown, L.A. (2007a).
- The sample includes only those with nonmissing information on all of the included variables in the multivariate analysis. This is to allow for comparison between the unadjusted and adjusted odds ratios.
- 10. Gannon, M. and Taylor-Butts, A. (2006).
- 11. The Labour Force Survey defines the core working age as 25 to 54 years.
- 12. Holloway, W. and Jefferson, T. (1997). The risk society in an age of anxiety: Situating fear of crime. British Journal of Sociology. 48(2): 255-266.
- 13. Keown, L.A. (2001). Perceived Risk of Victimization: A Canadian Perspective. Unpublished Master's Thesis. University of Calgary, Calgary, Alberta.

- 14. Ferraro, K.F. (1995). Fear of Crime: Interpreting Victimization Risk. Albany, NY. State University of New York Press.
- 15. Garland. D. (2001). The Culture of Control: Crime and Social Disorder in Contemporary Society. Oxford. Oxford University Press.
- 16. Keown, L.A. (2007a).
- 17. Gannon, M. and Taylor-Butts, A. (2006).
- 18, Ferraro, K.F. (1995).
- 19. Miethe, T.D. (1995). Fear and withdrawal from urban life. Annals of the American Academy of Political and Social Science. 539 (May): 14-27.
- 20. Ibid.
- 21. Gannon, M. and Taylor-Butts, A. (2006).
- 22. All models were checked using seemingly unrelated estimation to see if there were interactions between gender and the other variables in the model. An omnibus test indicated that the models for men and women were not different.
- 23. Models run on each of the four routine precautions produced similar results to the omnibus model presented here. Therefore, the omnibus model is presented. Further information on the individual models can be obtained from the author.
- 24. Gannon, M. and Taylor-Butts, A. (2006).

- 25. Skogan W. and Maxfield, M. (1981). Coping with Crime: Individual and Neighbourhood Reactions. Beverly Hills, CA. Sage Publications.
- 26. Gilchrist, E., Bannister, J. and Ditton, J. (1998). Women and the fear of crime: Challenging the accepted stereotype. The British Journal of Criminology. 38(2): 283-298.
- 27. Sutton, R.M. and Farall, S. (2005). Gender, socially desirable responding and fear of crime. British Journal of Criminology. 45: 212-224.
- 28. Keown, L.A. (2007a).
- 29. Ferraro, K.F. (1995).
- 30. Gilchrist, E., Bannister, J. and Ditton, J. (1998).
- 31. Gordon, M.T., LeBailly, R.K. and Riger S. (1982). Coping with urban crime: Women's use of precautionary behaviours. American Journal of Community Psychology. 10: 369.
- 32. Killias, M. and Cleric, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. The British Journal of Criminology. 40(3): 437-450.
- 33. Sacco, V.F. (1990). Gender, fear, and victimization: A preliminary application of power-control theory. Sociological Spectrum. 10(4): 485-506.

Table A.1 Logistic regression models for avoidance and routine precautions presenting odds ratios for 25 to 54 year olds living in a CMA¹

	Avoidance precaution	Routine precaution		Avoidance precaution	Routine precaution
	odds	ratio		odds	ratio
Sex			Married/common-law		
Male †	1.0	1.0	No †	1.0	1.0
Female	6.8*	5.5*	Yes	1.4*	1.1
Perceptions of crime			Member of a visible minority		
Crime in your neighbourhood h	as increased in tl	ne last 5 years	No †	1.0	1.0
No †	1.0	1.0	Yes	2.3*	1.3*
Yes	1.6*	1.4*	Household income		
Neighbourhood crime is higher	compared to oth	er areas	\$0 to \$29,999	3.2*	1.1
No †	1.0	1.0	\$30,000 to \$49,999	3.3*	1.2
Yes	1.7*	1.5*	\$50,000 to \$79,999	3.3*	1.3
Perceptions of fear and safety			\$80,000 to \$99,999	2.2*	1.4
Worried when home alone			\$100,000 and over †	1.0	1.0
No †	1.0	1.0	Income not stated	3.0*	1.1
Yes	3.4*	2.7*	Housing characteristics	5.0	1.1
Victimization			Own residence		
Self-reported vicitimization in t	he last 12 month	s (including	No †	1.0	1.0
spouse/ex-spouse events)	5. 5. 6.5.7.11	7	Yes	0.7*	1.3*
No †	1.0	1.0	Length of residence in the neig		1.0
Yes	1.1	1.3*	Less than 1 year	0.9	1.0
Demographics	1.01*	1.0	1 year to less than 5 years	1.0	1.3
Age (years)	1.01*	1.0	5 to 10 years	1.0	1.0
Postsecondary education	1.0	1.0	·		1.0
No †			More than 10 years †	1.0	1.0
Yes	0.7*	1.0			
Presence of child under 19 in th		1.0			
No †	1.0	1.0			
Yes	1.0	0.8*			

Source: Statistics Canada, General Social Survey, 2004.

reference group statistically significant difference at $p < 0.05\,$

^{1.} Census Metropolitan Area.

The Census and the evolution of gender roles in early 20th century Canada

by Derrick Thomas

Introduction

Canadian society has changed in many ways over the past century. Gender roles and relations are among the areas that have undergone the most profound transformations. Today, legal and social equality between the sexes are explicit and virtually unquestioned societal goals. Few young people today would recognize the Canada of 1911 or 1921. There were pronounced social distinctions between men and women which prevailed a mere generation ago. The Census of Canada has been part of this history and has evolved along with society generally. Early census collections and reports largely reflected the social context of their time.

Beyond the physical differences between men and women and their different reproductive functions are separate sets of socially-determined behavioural norms and performance standards attached to each gender. For example, these norms may dictate dress or acceptable occupations. Social conventions may also set down different roles within the family or establish a hierarchy with respect to the sharing of work, resources and decision-making in the household and more broadly.

Evidence of the social construction of gender roles can be seen by examining these roles across societies or across time. The variability seen suggests that roles are not innate. They must be established and maintained via a more or less general agreement. In Canada this consensus is thought to be evolving, at least over the longer term, from a patriarchal model to a more egalitarian one.¹

This article examines some of the ways in which gender roles changed over the first half of the 20th century. More specifically, it considers how the census adapted to these changes and reflected the new reality. The Census of Canada has been conducted since Confederation and provides us with a perspective on how Canadian society has changed as information on a relatively consistent set of characteristics has been captured over time. This study utilizes data collected in the decennial Censuses of Canada carried out between 1911 and 1951. For the first time computerized microdata for these census years are available.

Social constructs can be almost invisible to contemporary social actors and can form an important part of what is regarded as reality.² Some historical perspective is usually required before they can be understood. Gender roles and expectations represent a mode of thinking and acting, and form part of an individual's identity or relation to self and others.³ These constructs not only condition behaviour but

also influence what is regarded as scientifically interesting, worthy of recording and collecting information about. The information collected and the presentation of results are indicative of the roles played by household members and what was deemed important at various junctures. This information ostensibly provided basic knowledge for the formulation of social policy and the transformation of the society that it measured

The instructions to enumerators who collected information in these early censuses indicate who they were to question, on which information they were to focus, and which answers they were to disregard. Headquarters staff with the Dominion Bureau of Statistics (DBS)—as Statistics Canada was then called also recoded the information taken down by enumerators and organized it for publication. Their roles are less well documented but administrative reports and the categories used in the census publications provide some insight. The instructions prepared along with the classification and recoding done by census takers reflected the attitudes and social norms of the time.

Between 2003 and 2009 the Canadian Century Research Infrastructure (CCRI) project recompiled and digitized census data from the first half of the 20th century, giving us

a new perspective on the information collected from 1911 through 1951(See "What you should know about this study").⁴ A review of administrative material and census questionnaires, along with a comparison between

data published by the DBS and estimated data based on the CCRI samples sheds some light on how gender roles were perceived by society.

What was the position of women within their households and families?

The vast majority of women in early 20th century Canada lived in legally-constituted conjugal relationships.

What you should know about this study

Census enumeration

Prior to 1971, the census questionnaires were not filled out by household members in the now-familiar way. Statistics Canada and its predecessor, the Dominion Bureau of Statistics (DBS), employed thousands of enumerators who went door to door visiting virtually every household in the country. In 1951 the enumerator was described by the Chief Statistician of Canada as the "most important man in the organization" although 40% were women that year. These enumerators questioned household members, filled out forms and submitted the data for review and editing by Census Commissioners and DBS headquarters staff. The same basic set of questions was put to each and every household.

Canadian Century Research Infrastructure

The Canadian Century Research Infrastructure (CCRI) is a five-year effort to build a comprehensive database of information on early 20th century Canada that might be used to address research questions from a wide variety of academic disciplines.¹ The project has been supported by the Canadian Foundation for Innovation, federal and provincial governments, a number of Canadian universities and Statistics Canada. It involves a large team of academics, researchers and specialists and is linked to a number of similar international projects.

An important part of the project has been the computerization and rejuvenation of microdata collected by the decennial Censuses of Canada from 1911 to 1951. Data from these pre-computer era censuses had never been digitized and existed only in the form of micro-filmed census returns as completed by enumerators—often in cursively written ink or pencil. Costs dictated that only a sample, about 5%, of completed census forms for each census could be captured. While this data capture cannot be regarded as a new collection it is certainly a new compilation. Data entry personnel worked from what amount to photos of original documents. The coding structure, rules and coding decisions had largely to be reinvented in the absence of corporate memory and with sketchy documentation.

CCRI operators key-entered all responses as recorded by enumerators. An effort was made to digitize the information verbatim or at the lowest level of aggregation. In cases where corrections had been made at the time of the original census by Commissioners or DBS headquarters staff, CCRI operators entered the enumerator's original response. For some variables operators entered the DBS corrections in a second associated field. This allows a researcher to access the effects of such 'corrections'.

CCRI sampling

CCRI teams in five universities across the country worked from the microfilmed schedules hand-written by the original enumerators. The microfilms were made available by Statistics Canada under conditions which respected the privacy of census respondents. The university centres used modern data-capture software to browse the reels of microfilm and capture computer-readable images. Sampling occurred within geographic strata corresponding to census subdistricts (enumeration areas in modern parlance). With some operator input, the software selected dwellings from a randomly determined start point at a predetermined interval. The interval or sampling fraction differed according to the size of the dwelling and, in the case of large dwellings, according to whether the dwelling contained multiple units/households or a collection of individuals in a dormitory or institutional setting. Dwellings with 30 or fewer persons were sampled at a rate of 1 in 20 for 1911, 1 in 25 for 1921, and 1 in 33 for 1931, 1941 and 1951. In 1911 all dwellings with more than 30 occupants were selected. One in 5 households (1 in 4 for 1911) in each multi-unit large dwelling was sampled and 1 in 10 individuals were selected in each large collective dwelling.² The reciprocal of these sampling fractions in conjunction with information about the dwelling size and type were used to compute the weights.

- Gaffield, Chad. (2007). "Conceptualizing and Constructing the Canadian Century Research Infrastructure". Historical Methods. 40(2).
- Darroch, G., R.B. Smith and M. Gaudreault. (2007). "CCRI Sample Designs and Sample Point Identification, Data Entry, and Reporting (SPIDER) Software". Historical Methods. 40(2), 65-75.

Common-law relationships were infrequent and not reported to census takers until 1981. According to data recompiled by the CCRI, at each census from 1911 to 1951, close to 90% of women had entered into a legal marriage by age 50. The great majority raised children and remained in these families for much of their lives as separation and divorce were extremely rare. Only 2,275 divorces were granted in Canada between 1881 and 1921.5 According to the data compiled by the CCRI, only about 1 in 1000 women were divorced or separated at each census taken between 1911 and 1941. In 1951 the rate increased to 4 in 1000. In 2006, by contrast, over 120 in 1000 women 15 years of age and over were divorced or separated.

In the early part of the last century men were apparently regarded as the persons in charge of their families. The Census reflected this view. Census takers employed the term 'head of household' when collecting and organizing the information gathered from each family. Other household members were defined by their relationship to the household head and household dwelling information was gathered only with reference to the household head. For example, home ownership was recorded for the household head regardless of who owned the dwelling. Information published on employment and earnings also tended to focus on the household head.

While there was no explicit order to that effect, the man or husband was clearly considered to be the 'head' of the household. The position of males was implicit in the instructions to enumerators which remained essentially unchanged over the 1911 to 1941 period. They stipulated that "The members of the family or household ... are to be entered in the following order, namely: Head first, wife second then sons and daughters in the order of their ages, and lastly relatives, servants, boarders or other persons living in the family or household."6 The 'Head'/'Wife'

distinction was also reflected in published tables.⁷ Only in singleparent or all-female households was a woman to be considered the 'head'.

The data shows that the vast majority of household heads were male. However, the proportion of household heads that were female grew between 1911 and 1951 (Chart 1). This may be related to absent husbands and fathers, particularly during the period that included the Second World War. An examination of the data digitized by the CCRI indicates that only in a few thousand cases in each census year did enumerators designate a female as head of the household when a male partner was present.

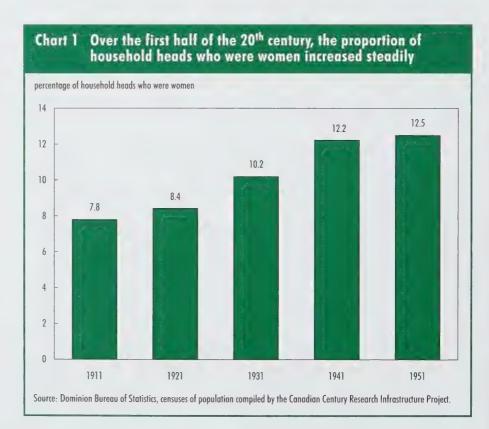
By 1951 society was changing and the census instructions reflected a new awareness. For the first time, it was explicitly mentioned that the husband would be considered the head of the household. However, no hierarchy or social status was implied and census manuals noted that the designation of household head was only for the purposes

of organizing the data collected. According to the Enumeration Manual for the ninth Census of Canada, "For Census purposes every household must have a head. In households consisting of husband and wife with or without children, the husband will be recorded as 'head'."

Husbands continued to be considered the head of their households up to the beginning of self-enumeration in 1971. In 1976 either husband or wife could be considered head of the household. With the 1981 Census the term was dropped completely.

How was the fertility of women regarded?

Over the early part of the last century, one of the most prominent roles of a wife was to give birth and raise children within a male-headed family. For the 1941 Census detailed information was collected on fertility. Women who were or had been married were asked if they had ever given birth to a child. Over 83% of those 15 years old or over had birthed a child and



one in five had given birth to six or more. While almost exactly the same proportion of women in relationships have children today, very few give birth to six or more (less than 3% of those surveyed in 2006⁸).

One pronounced change has been the attitude toward the fertility of unattached women. For example, in 2006 almost 12% of single women 15 years of age or over (excluding those in common-law relationships) had given birth to at least one child. Because childbirth outside of marriage was considered rare, this question was not put to single women in 1941. Perhaps the social stigma associated with having a child outside the confines of marriage was so strong that it precluded enumerators asking the question. However, childbirth outside of wedlock did occur. Data compiled for the CCRI indicate that although unpublished, there were approximately 6,000 births outside of wedlock recorded in 1941.

Was the ethnic legacy of mothers acknowledged?

While women bore and raised children, a child's ancestry was traced through the father. A mother's ancestry was not considered in the classification of the ancestry of their child. It was not until 1981 that both parents' ancestry was recorded.

The 1931 Census enumerator instructions for the collection of ancestry data are typical for the period. They directed that, "A person whose father is English and whose mother is French will be recorded as of English origin, while a person whose father is French and whose mother is English will be recorded as of French origin, and similarly with other combinations..." These instructions applied to the majority of census respondents who were of European or 'white' origins. Aboriginals and members of visible minority groups were treated differently.9

The logic of tracing ancestry through the male line would seem to imply that each person should have a

single origin. Indeed the instructions given to enumerators did not allow for multiple origins. The Dominion Bureau of Statistics did not publish any figures for people claiming more than one origin between 1911 and 1951. However, the data compiled by the CCRI clearly show that enumerators did sometimes record multiple ancestries. These data show a gradual increase in multiple ancestries from about 1 in 300 respondents in 1921 and 1931 to about 1 in 200 in 1941 and over 1 in 150 in 1951. With the 1981 Census, Canadians were permitted to write in as many ethnicities as they felt they had. They were thus able to report their maternal ancestry.

How was citizenship dealt with for women?

Women did not fully enjoy the rights of citizenship in early 20th century Canada. They did not, for instance, gain the right to vote in federal elections until 1920. According to Canadian law, before 1932 a woman took on the nationality of her husband when they married. A woman born or naturalized in Canada who married an 'alien' 10 lost her Canadian citizenship. Women legally gave up their right to vote and to a Canadian passport if they married someone other than a British subject or if their husband became an alien over the course of their marriage. Similarly, a woman of foreign nationality gained Canadian citizenship by virtue of her marriage to a Canadian. 11 In 1921 and 1931 enumerator instructions indicated that "A married woman is to be reported as of the same citizenship as her husband."

Regardless of gender, citizenship could be lost in a number of ways. For example, it was possible to lose citizenship via renunciation or taking on another allegiance. While it is not possible to determine from census data precisely how many Canadian-born people lost their rights, according to the 1921 to 1941 census data compiled by the CCRI, the number of Canadian- and British-

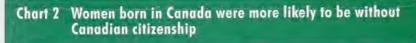
born women residing in Canada without citizenship exceeded, by a considerable number, the number of men in that situation (Chart 2). Loss of citizenship status due to marriage to a non-British subject is the most likely explanation for this gender difference.

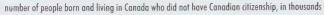
Between 1932 and 1947, a married woman's citizenship depended on the nationality law of her husband's country of allegiance. If she legally acquired his citizenship she lost her Canadian status. Otherwise she remained Canadian. The citizenship law of 1947 removed much of the gender discrimination with respect to citizenship and census datacollection practices quickly followed. By 1951, the number of Canadian born who were not citizens was more equal for men and women (Chart 2).

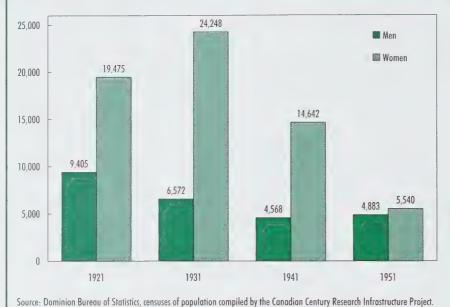
Was the work of women acknowledged?

Perhaps the most interesting area in which social conventions changed over the 20th century is the participation of women in paid employment, their occupations and earnings. During the early part of the 20th century, most women did not participate in the paid labour force. In 1931, for example, just 16% of women were involved in paid employment, compared to almost 70% of men. By 2006, however, the employment rate for women was almost 60%. There continue to be differences in the employment experiences of men and women. For example, the barriers faced by women in the workforce and the gap in earnings between men and women have been well documented¹² and have led to federal and provincial employment equity legislation.

While the unpaid work done in the home or for the family was important, during the first half of the 20th century governments and businesses were more interested in labour sold on markets.¹³ Before the 1931 Census, women working in their own home were regarded as having no occupation. For example, the enumeration manual for 1921 states







that under occupation: "In the case of a woman doing housework in her own home, without salary or wages, and having no other employment, the entry should be none." While the information was not published by the Dominion Bureau of Statistics. enumerators often recorded the answer 'homemaker' or 'housewife' in this situation. Beginning in 1931 the enumeration manual indicated that the term "homemaker" was to be used for women working in their own homes. CCRI operators recorded the answer 'homemaker' for about 2.45 million females and 12.600 males when they recompiled the 1941 Census information from the original returns. The figure for males had not been published by the DBS.

Little official documentation has survived about the coding structures used by those who compiled and tabulated census information in the early part of the last century. CCRI staff coded occupation anew from the information originally written down by enumerators. Needless to say, jobs and occupational categories have

changed over the past half century and the occupational classification used by the CCRI project differs from the one originally employed by the DBS.

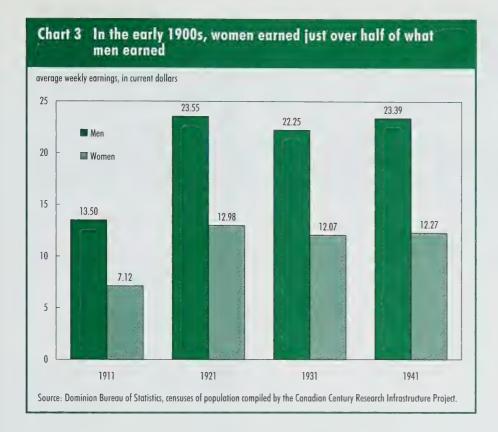
For instance, CCRI coders identified many more gainfully employed women than the original census data published by the DBS. Indeed, the 1941 Census data recompiled by the CCRI had more than three times as many unpaid family workers as did the published counts from the era (data not shown). It seems the modern coders were more likely than the original coders to describe some homemakers and women on farms as 'unpaid family workers'. For census purposes, the term 'unpaid family worker' applied only to someone working in an enterprise for which someone in the family receives money. Although the modern census now gathers information on elder care, child care and other work performed in the home, homemakers are still not regarded as being a part of the labour market.

Women who worked in occupations normally deemed to be the preserve of men may not have been counted in early censuses. Enumerators were explicitly instructed to treat with skepticism any suggestion that a woman had any 'unusual' occupation. Further inquiry and correction was deemed necessary in such cases. For example, according to the 1931 enumeration manual, "There are many occupations such as carpenter and blacksmith which women usually do not follow. Therefore, if you are told that a woman follows an occupation which is peculiar or unusual for a woman, verify the statement."

A similar instruction appeared in the 1921 and 1941 manuals. The occupation data published by the DBS after each census from 1911 to 1951 indicates that there were no females in these occupations. The data coded by CCRI suggests, however, that even after close questioning, hundreds of women were deemed by enumerators to have worked as carpenters and blacksmiths. These answers appear to have been recoded by headquarters staff when official tabulations were prepared.

Proportionally few women have traditionally gone into trade-related occupations and this continues today. For example, women accounted for only 3% of those registered in apprenticeship programs in the construction trades as late as 2005. ¹⁴ The modern census makes no distinction between men and women when collecting occupational data and where numbers warrant these data are published.

The earnings of women have not always been published. The census reports from the beginning of the 20th century focused on the earnings of household heads. Following the 1921 Census, for example, many earnings tables were produced for male heads of households only. The data was taken down by enumerators, however, and can be tabulated based on the CCRI sample.



Where the DBS did publish earnings for women they correspond with the data obtained from the CCRI. On average for the census years under study, a working woman earned just over 50 cents for each dollar earned by a working man.¹⁵ The gap did not change dramatically between 1921 and 1941. The persistent gender wage gap has been an important focus of Statistics Canada analysis and publications over the past few decades.¹⁶

Summary

The primary role of most adult women living in the first half of the 20th century was to care for their family and home. Men more often worked outside the home for pay and assumed the role of the household head. Census collections were designed with this social reality in mind. Husbands were the official heads of their households for census purposes and other household members were defined by their relationship to the male head.

According to the norms of the time ancestry or ethnicity was traced in the census through the male line. Children were recorded as having the cultural heritage of their fathers.

Until 1947, a women's citizenship was tied to her husband's citizenship both legally and for census purposes.

Women working in their homes were not considered 'gainfully employed'. Before 1931 they were considered to have no occupation. Women in some non-traditional or 'unusual' occupations, moreover, were not tabulated in census publications.

Census collection emphasized paid work and in some cases earnings information was published only for heads of households. According to the data recompiled for the CCRI, average weekly earnings for women and men in the labour market differed substantially for the census years examined here. On average, a woman in the paid workforce earned about half of what a man earned in 1921, 1931 and 1941. Interestingly,

although the wage gap has narrowed, in 2008 the average hourly earnings for women continued to be below those of men's—illustrating that there remain differences in labour market experiences between genders.

Censuses were planned and carried out within a social and historical context. The expectations of census takers played a role in what they looked for and in what they found. The data collected and published tended to reflect and reinforce the norms of the day. The original and rejuvenated census data, documentation and instruction manuals from the early part of the twentieth century enable researchers to examine how gender roles have evolved and changed as changes in society occurred.



Derrick Thomas is a senior analyst with Social and Aboriginal Statistics Division, Statistics Canada.

- Bakker, I. ed. (1996). Rethinking Restructuring: Gender and Change in Canada. Toronto: University of Toronto Press.
- Berger, P. L. and T. Luckman. (1966). The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Garden City: Doubleday & Co.
- 3. Foucault, M. (1985). The Use of Pleasure: The History of Sexuality: Volume II. Random House.
- The 1961 Census was computerized but has been rendered inaccessible by technological and other changes. It too is being rejuvenated but is not yet available.
- 5. Dominion Bureau of Statistics. (1921).
 Population, age, conjugal condition, birthplace, immigration, citizenship, language, educational status, school attendance, blindness and deaf mutism:
 Sixth Census of Canada, 1921, Volume 2, Bulletin XV.
- Census and Statistics Office. (1911). Instructions to officers, commissioners and enumerators: Fifth Census of Canada.
- Dominion Bureau of Statistics. (1927). Population: Dwellings, Families, Conjugal Condition of Family Head, Children, Orphanhood, Wage Earners. Sixth Census of Canada, Volume III.

- 8. Special tabulation from the General Social Survey, Cycle 20. The data have not been age-standardized.
- 9. The history of the census origins or ancestry question is as complex and storied as that of gender. It also reflects evolving social attitudes of the period. Early censuses asked for 'racial or tribal origins'. This terminology was dropped following World War II. In 1951 a question in the same position and otherwise sharing much the same vocabulary asked simply about 'Origins'. Before 1951, persons of mixed white and visibly different ancestry were ascribed the origins of their visiblydifferent parent of whatever gender. The children of mixed 'white' and Aboriginal parents were given the ancestry of their mother.
- Aliens did not include those born as British subjects in the United Kingdom or elsewhere in the British empire.
- Canadian Nationals Act of 1921- An Act to Define Canadian Nationals and to provide for the renunciation of Canadian Nationality. Chapter 21. Revised Statutes of Canada 1927. See also the Immigration Acts of 1910 and 1927.

- For example: Statistics Canada. (2005).
 Women in Canada: A gender-based statistical report. 5th edition. Catalogue no. 89-503-XPE.
- Statistics Canada. (1995). Households' unpaid work: Measurement and Valuation. Studies in National Accounting. Catalogue 13-603E.
- 14. Statistics Canada. (2007). The Daily, November 15, 2007. Registered Apprenticeship Training Programs. Watt-Malcolm, Bonnie and Beth Young. (2003). Canadian women in the industrial trades: a historical perspective. In the Proceedings of The Changing Fact of Work and Learning Conference, September Edmonton, Alberta. Retrieved February 11, 2010 from http://wln.ualberta.ca/papers/pdf/47.pdf.
- 15. These are overall averages and do not take account experience, education, hours worked or occupation.
- 16. Statistics Canada. (2005).

Need more information from Statistics Canada?

Call our inquiries line:

1-800-263-1136

To order publications:

Order line: 1-800-267-6677 Internet: infostats@statcan.gc.ca TTY line: 1-800-363-7629

Accessing and ordering information

Canadian Social Trends Print format, semi-annual (twice per year)*

(Catalogue no. 11-008-X) \$24 per issue, \$39 per annual subscription

PDF/HTML format, every 6 weeks (Catalogue no. 11-008-X): Free

 A CST print anthology is now issued twice a year. The anthology contains all the CST articles released electronically in the previous six months, and the subscription price remains the same.

Education and Library Discount: 30% discount (plus applicable taxes in Canada or shipping charges outside Canada)

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "The agency" > "Providing services to Canadians."

If you're on the move...

Make sure we know where to find you by forwarding the subscriber's name, old address, new address, telephone number and client reference number to:

Statistics Canada Finance R.H. Couts Bldg., 6th Floor 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6

or by phone at 1-800-263-1136 or 1-800-267-6677; or by fax at 1-877-287-4369; or by Internet at infostats@statcan.gc.ca

We require six weeks advance notice to ensure unintercupted delivery, so please keep us informed when you're on the move!



Social fact sheet

Table 1	Estimates of	population, b	y sex, for July T	. Canada, sele	ect vears
		habararas a		V samman' som	The state of

	1981	1991	2003	2004	2005	2006	2007	2008	2009
					number				
Sex									
Men	12,351,233	13,904,391	15,675,460	15,825,754	15,979,800	16,147,873	16,325,702	16,524,504	16,732,476
Women	12,468,682	14,133,029	15,964,210	16,114,922	16,265,409	16,428,201	16,606,254	16,802,833	17,007,383
					years				
Median age	9								
Men	28.8	32.5	37.1	37.4	37.7	38.0	38.2	38.4	38.6
Women	30.2	34.0	38.9	39.2	39.6	39.9	40.1	40.3	40.5

Source: Statistics Canada, CANSIM Table 051-0001.

- In 1981 Canada's population was approximately 25 million. In 2009, the population was estimated to be almost 34 million. In recent years, much of the population growth has been a result of international migration.
- The population of Canada continues to age. In 2009, the median age for the Canadian population was 39.5 years. The median age of women was 40.5 compared to 38.6 for men. Fertility rates persistently below the generation replacement level and an increasing life expectancy are the main factors explaining the ageing process of the Canadian population.

Table 2 Life expectancy at birth and at age 65, by sex, Canada, select years

	1981	1991	2003	2004	2005	2006
	-		уе	ears		
Life expectancy						
At birth	75.6	77.8	79.9	80.2	80.4	80.8
Men	72.1	74.6	77.4	77.8	78.0	78.4
Women	79.3	80.9	82.4	82.6	82.7	83.0
At age 65	17.0	18.0	19.2	19.5	19.6	19.9
Men	14.7	15.8	17.4	17.7	17.9	18.2
Women	19.2	19.9	20.8	21.0	21.1	21.4

Source: Statistics Canada, CANSIM Tables 102-0511 and 102-0025.

- Life expectancy in Canada continues to increase. Life expectancy at birth was 81 years in 2006, compared with 76 years in 1981. A girl born in 2006 can expect to live 83 years; a boy can expect to live 78 years.
- The difference in life expectancy for men and women is decreasing. In 1981 there was a difference in life expectancy of 7.2 years for women and men. By 2006 this difference had shrunk to 4.6 years.
- Life expectancy at age 65 is also increasing for Canadians. For someone who was 65 in 1981, they could expect to live another 17 years compared to 20 years for someone who was 65 in 2006.
- Between 1981 and 2006, the increase in life expectancy for men at age 65 was impressive. For example, in 1981 a male aged 65 could expect to live another 14.7 years compared with a female who could expect to live another 19.2 years. By 2006, a 65 year old man could expect to live another 18.2 years compared to 21.4 years for a 65 year old woman.

	2003	2005	2007	200
	р	ercentage of popula	tion 12 years and o	lder
Life satisfaction (very s	atisfied or satisfied)			
Total	91.3	91.8	91.9	91.4
Men	91.3	91.9	92.0	91.5
Women	91.4	91.7	91.8	91.2
Life stress (quite a lot)				
Total	24.1	22.9	22.5	22.3
Men	23.4	21.9	21.5	21.2
Women	24.8	23.8	23.5	23.4

64.0

64.7

63.9

65.4

65.0

64.9

Source: Statistics Canada, CANSIM table 105-0501.

Men

Women

• More than 9 out of 10 women and men stated that they were satisfied or very satisfied with their life in general in 2008.

63.5

64.2

- Men and women were equally likely to feel stress. For example, in 2008 a little more than 1 in 5 men and women stated that they had quite a lot of life stress.
- Research has shown that having a strong sense of belonging to one's community is highly
 correlated with physical and mental well-being. Between 2003 and 2008, about 65% of
 Canadians stated that they had a somewhat strong or very strong sense of belonging to their
 community.



Table 4 Health indicators, by sex, Canada, select years

	2003	2005	2007	200
	F	percentage of popula	ntion 12 years and o	lder
Health (very good or exce				
Total	58.4	60.1	59.6	58.
Men	59.5	60.6	60.3	59.
Women	57.2	59.6	59.0	58.
Health (fair or poor)				
Total	11.3	11.2	11.3	11.
Men	10.3	10.7	10.9	11.
Women	12.4	11.7	11.8	11.
Mental health (very good	or excellent)			
Total	73.4	74.4	74.8	74.
Men	73.6	75.0	75.5	75.
Women	73.3	73.9	74.1	73.
Mental health (fair or po				
Total	4.7	4.9	4.7	5.
Men	4.3	4.5	4.6	4
Women	5.1	5.2	4.7	5
Participation or activity li				
Total	31.3	29.7	31.3	29.
Men	29.5	28.6	29.6	27.
Women	33.1	30.9	33.0	30.
Diabetes				
Total	4.6	4.9	5.8	5.
Men	4.9	5.4	6.4	6.
Women	4.3	4.4	5.2	5.
High blood pressure				
Total	14.4	15.0	16.0	16
Men	13.4	14.2	15.1	15
Women	15.4	15.7	16.8	16
Asthma				
Total	8.4	8.3	8.1	8
Men	7.1	6.9	6.7	7
Women	9.6	9.7	9.4	9
Arthritis	7.0	7.7	7.1	
Total	16.8	16.4	15.0	15
Men	12.6	12.5	11.8	12
Women	20.8	20.1	18.1	18
Body mass index - overw			(0.1	, ,
Total	34.1	34.2	34.0	33
Men	41.3	41.2	40.9	40
Women	26.8	27.1	27.1	27
WOHIEH	20.0	27.1	27.1	2



Social fact sheet

Table 4 Health indicators, by sex, Canada, select years (continued)

	2003	2005	2007	2008
		percentage of popula	tion 12 years and o	der
Body mass index — o	bese (self reported) ^{1,2}			
Total	15.3	15.8	16.8	17.2
Men	16.0	16.9	17.9	18.3
Women	14.5	14.7	15.8	16.2

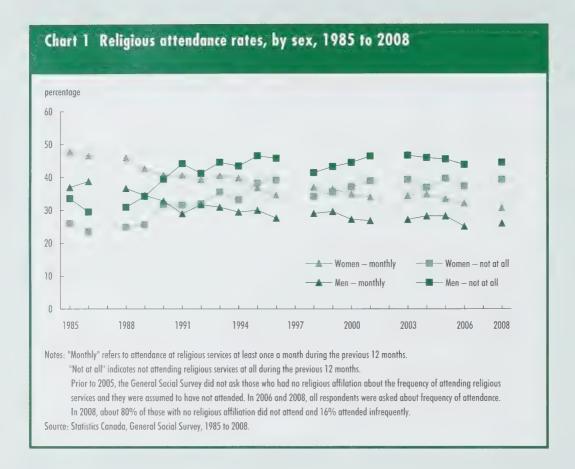
1. For those 18 years of age and over.

2. Body mass index (BMI) is a method of classifying body weight according to health risk, according to the World Health Organization (WHO) and Health Canada guidelines. It is calculated by dividing the respondent's body weight (in kilograms) by their height (in metres) squared.

Source: Statistics Canada, CANSIM table 105-0501.

- While women and men were equally likely to state that their health was very good or excellent in 2008, women were slightly more likely than men to state they have a participation or activity limitation (30% vs. 28%).
- The incidence of high blood pressure increased between 2003 and 2008 from about 14% to just over 16%. The increase occurred among both men and women and by 2008 about 16% of men and 17% of women had high blood pressure.
- Women were more likely to have arthritis or asthma than men. In 2008, close to 10% of women compared to 7% of men had asthma. The proportion of women with arthritis was about 19% compared to 12% of men.

Social fact sheet



• Women were more likely to attend a religious service at least once a month over the 1985 to 2008 period than were men. However, by 2008 the difference between monthly attendance rates for men and women had declined.

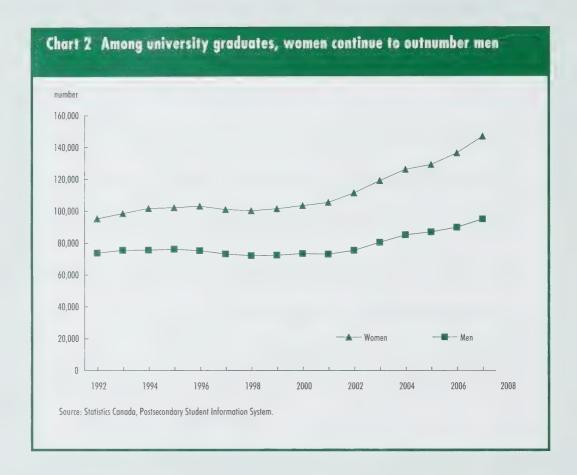
Table 5 Highest level of educational attainment for the population aged 25 to 64, by sex, Canada, 2001 and 2006

	2001	2006
	perce	ntage
No certificate, diploma or degree ¹	24.6	15.4
Men	25.3	16.4
Women	23.9	14.5
High school certificate or equivalent ¹	22.0	23.9
Men	20.6	22.8
Women	23.4	25.0
Apprenticeship or trades certificate or diploma	12.9	12.4
Men	16.5	16.0
Women	9.3	9.0
College, CEGEP or other non-university certificate or diploma	17.9	20.3
Men	15.0	17.9
Women	20.7	22.6
University certificate or diploma below the bachelor level ²	2.9	5.0
Men	2.4	4.3
Women	3.4	5.6
University certificate, diploma or degree at bachelor's level		
or above	19.7	22.9
Men	20.2	22.6
Women	19.2	23.3

- When observing 2001-2006 trends for "No degree, certificate or diploma" and "High school graduation certificate
 or equivalent", readers should be aware that the census questionnaire was redesigned for 2006 to address suspected
 underreporting of high school completion.
- Users should be aware that in 2006 there was unexpected growth in the 'University certificate or diploma below the bachelor level' category compared to the 2001 Census. It is recommended that no comparison be made between 2001 and 2006 data for this category.

Source: Statistics Canada, Census of population, 2001 and 2006.

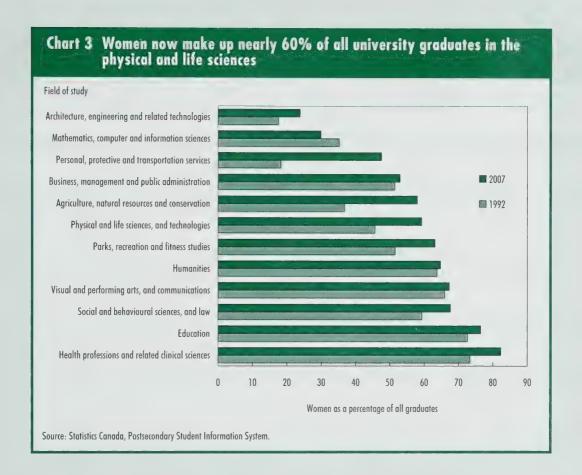
- Six out of every 10 adults aged between 25 and 64 had completed some form of postsecondary education in 2006, according to the census. Men and women were equally likely to have some type of postsecondary education.
- Just under one-quarter (24%) of the adults aged 25 to 64 had a high school diploma as their highest level of educational attainment, while 15% had less than a high school education.
- The proportion of men and women who had a university certificate, diploma or degree at the bachelor's level or above increased between 2001 and 2006. For example, in 2001, 19.2% of women and 20.2% of men had a bachelor's degree or higher. By 2006, 23.3% of women and 22.6% of men had a bachelor's degree or higher.



- The number of students graduating from Canadian universities rose 43% between 1992 and 2007, increasing from 169,000 in 1992 to 242,000 in 2007. The number of both male and female graduates has grown steadily since 2002, following a period of stagnant growth in the mid-1990s.
- In 2007, women made up almost 61% of all university graduates up from 56% in 1992.



Social fact sheet



- Women have increased their share of university graduates such that in 2007, they accounted for more than 50% of graduates in all fields, except for three: architecture and engineering; mathematics and computer sciences; and personal, protective and transportation services.
- Women increased their share of graduates from less than 50% in 1992 to over 50% in 2007 in two fields—physical and life sciences; and agriculture, natural resources and conservation.



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	20
	-					in tho	usands					
Labour ford	е											
Total	15,316.3	15,588.3	15,847.0	16,109.8	16,579.3	16,958.5	17,182.3	17,342.6	17,592.8	17,945.8	18,245.1	18,3
Men	8,324.3	8,457.6	8,569.2	8,690.9	8,906.2	9,067.7	9,166.0	9,243.7	9,335.4	9,492.8	9,654.0	9,6
Women	6,992.0	7,130.7	7,277.8	7,418.9	7,673.1	7,890.9	8,016.3	8,098.8	8,257.3	8,453.0	8,591.2	8,6
Employed												
Total	14,046.2	14,406.7	14,764.2	14,946.2	15,310.4	15,672.3	15,947.0	16,169.7	16,484.3	16,866.4	17,125.8	16,8
Men	7,612.8	7,797.2	7,973.9	8,035.8	8,184.4	8,348.1	8,480.6	8,594.7	8,727.1	8,888.9	9,021.3	8,7
Women	6,433.4	6,609.6	6,790.4	6,910.3	7,126.0	7,324.2	7,466.4	7,575.0	7,757.2	7,977.5	8,104.5	8,0
Full-time e												
Total	11,403.4	11,759.5	12,093.6	12,242.5	12,439.3	12,705.3	12,998.1	13,206.2	13,509.7	13,803.1	13,976.6	13,6
Men	6,811.2	6,992.1	7,150.8	7,195.3	7,287.9	7,423.0	7,559.3	7,664.0	7,781.0	7,909.9	8,008.0	7,7
Women	4,592.2	4,767.4	4,942.8	5,047.1	5,151.4	5,282.3	5,438.8	5,542.3	5,728.7	5,893.2	5,968.7	5,9
Part-time e	. ,											
Total	2,642.8	2,647.3	2,670.6	2,703.7	2,871.1	2,967.0	2,948.9	2,963.5	2,974.7	3,063.3	3,149.2	3,2
Men	801.6	805.1	823.1	840.5	896.5	925.0	921.3	930.7	946.1	979.0	1,013.3	1,0
Women	1,841.2	1,842.2	1,847.5	1,863.2	1,974.6	2,041.9	2,027.6	2,032.8	2,028.5	2,084.3	2,135.9	2,1
Unemploye												
Total	1,270.1	1,181.6	1,082.8	1,163.6	1,268.9	1,286.2	1,235.3	1,172.8	1,108.4	1,079.4	1,119.3	1,5
Меп	711.5	660.4	595.3	655.1	721.7	719.6	685.4	649.0	608.3	603.9	632.6	9
Women	558.6	521.2	487.5	508.5	547.2	566.6	549.9	523.8	500.1	475.5	486.6	61
Not in the	abour force	9	0.047.0									

8,206.4 8,198.6 8,247.2 8,334.5 8,218.0 8,147.9 8,261.1 8,462.9 8,592.4 8,607.5 8,679.5 8,940.5

Women 4,981.8 4,973.3 4,973.8 5,001.0 4,923.1 4,863.9 4,911.9 5,014.0 5,045.1 5,035.0 5,081.7

3,224.6 3,225.3 3,273.4 3,333.5 3,294.8 3,284.0 3,349.2 3,448.9 3,547.2 3,572.5 3,597.8 3,761.8

5,178.7

Total



Table 1 Labour force characteristics, by sex, Canada, 1998 to 2009 (continued)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
						percei	ntage					
Unemployme	ent rate											
Total	8.3	7.6	6.8	7.2	7.7	7.6	7.2	6.8	6.3	6.0	6.1	8.3
Men	8.5	7.8	6.9	7.5	8.1	7.9	7.5	7.0	6.5	6.4	6.6	9.4
Women	8.0	7.3	6.7	6.9	7.1	7.2	6.9	6.5	6.1	5.6	5.7	7.0
Employment	rate											
Total	59.7	60.6	61.3	61.1	61.7	62.4	62.7	62.7	63.0	63.5	63.6	61.7
Men	65.9	66.7	67.3	66.8	67.1	67.6	67.8	67.7	67.7	68.0	68.1	65.2
Women	53.7	54.6	55.4	55.6	56.6	57.4	57.8	57.8	58.3	59.1	59.3	58.3

1. Full-time employment is for those working 30 hours or more per week at their main or only job. Source: Statistics Canada, CANSIM table 282-0002.

- In 2009, women made up 47% of the labour force. While women continued to be more likely to work part-time than men, close to 73% of women who worked were full-time workers, up from 71% in 1998.
- Between 1998 and 2008 the employment rate increased from about 60% to almost 64%.
 This was the result of an expanding economy and job growth. The employment rate for men increased from about 66% to 68%. The growth in the employment rate for women was more pronounced increasing from 54% to 59% between 1998 and 2008. In 2009 however, the employment rate contracted for both women and men.
- After several years of decline—the unemployment rate in Canada climbed to 8.3% in 2009.
 While both men and women experienced increasing rates of unemployment, the increase was more profound for men. Between 2008 and 2009 the number of unemployed men increased by 44%, as the unemployment rate for men climbed from 6.6% to 9.4% in 2009. For women, the number unemployed increased by 25% between 2008 and 2009, resulting in an increase in the unemployment rate for women—from 5.7% to 7.0%.
- For each year between 1998 and 2008 the number of individuals working full-time grew. However, in 2009 the number of men working full-time declined by 3.5% and women experienced a 1.1% decline in the number working full-time. At the same time, the number of men and women working part-time continued to increase.



Table 2 Average hourly wages of employees aged 15 and older by sex, job permanence and union coverage, by sex, Canada, annual, 1998 to 2008

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				αv	erage ho	urly wages Ilars	,1				
All employees(pemanen	t										
and temporary)	15.78	16.17	16.66	17.22	17.66	18.04	18.50	19.09	19.72	20.41	21.32
Men	17.32	17.79	18.38	18.98	19.37	19.75	20.16	20.74	21.43	22.17	23.18
Women	14.10	14.42	14.81	15.35	15.84	16.26	16.78	17.38	17.96	18.62	19.43
Union coverage ²	18.68	19.05	19.46	19.89	20.51	20.98	21.57	22.15	22.73	23.51	24.46
Men	19.63	20.05	20.48	20.95	21.42	21.96	22.44	22.96	23.58	24.32	25.28
Women	17.57	17.91	18.30	18.72	19.53	19.92	20.66	21.30	21.86	22.71	23.65
Non-union coverage ³	14.35	14.80	15.32	15.94	16.31	16.65	17.08	17.65	18.33	18.98	19.89
Men	16.12	16.67	17.33	18.00	18.40	18.67	19.10	19.69	20.43	21.20	22.24
Women	12.50	12.84	13.21	13.79	14.10	14.56	14.98	15.54	16.15	16.71	17.48
Permanent employees ⁴	16.27	16.69	17.24	17.81	18.27	18.62	19.12	19.73	20.38	21.07	21.98
Men	17.91	18.42	19.06	19.65	20.09	20.45	20.87	21.50	22.19	22.93	23.97
Women	14.45	14.81	15.25	15.80	16.31	16.70	17.27	17.86	18.49	19.14	19.94
Union coverage	18.87	19.29	19.71	20.15	20.78	21.24	21.87	22.43	23.07	23.82	24.79
Men	19.80	20.27	20.70	21.20	21.68	22.18	22.74	23.21	23.85	24.57	25.55
Women	17.73	18.13	18.55	18.95	19.80	20.20	20.94	21.59	22.24	23.06	24.01
Non-union coverage	14.92	15.40	16.01	16.65	17.04	17.34	17.80	18.41	19.11	19.77	20.68
Men	16.86	17.45	18.20	18.86	19.30	19.57	19.97	20.65	21.40	22.17	23.24
Women	12.89	13.25	13.69	14.30	14.63	15.04	15.53	16.07	16.72	17.29	18.04
Temporary employees ⁵	12.14	12.34	12.60	13.20	13.55	13.95	14.26	14.91	15.30	15.99	16.59
Men	12.62	12.98	13.28	13.98	14.27	14.62	14.90	15.45	16.02	16.78	17.30
Women	11.67	11.71	11.94	12.48	12.87	13.31	13.68	14.40	14.64	15.25	15.91
Union coverage	16.82	16.78	17.18	17.76	18.30	18.78	19.09	19.94	20.20	21.14	21.84
Men	17.52	17.59	18.11	18.59	19.08	19.93	19.63	20.72	21.29	22.14	22.86
Women	16.23	16.05	16.38	17.01	17.63	17.79	18.66	19.29	19.30	20.32	20.99



Table 2 Average hourly wages of employees aged 15 and older by sex, job permanence and union coverage, by sex, Canada, annual, 1998 to 2008 (continued)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				av	erage hou in dol		1				
Non-union coverage	10.56	10.87	11.03	11.53	11.75	12.10	12.47	13.01	13.38	13.97	14.54
Men	11.13	11.55	11.75	12.33	12.56	12.74	13.30	13.60	14.12	14.85	15.33
Women	9.99	10.17	10.31	10.78	10.93	11.45	11.67	12.42	12.65	13.12	13.75

- 1. Information is collected on the usual wages or salary of employees at their main job. Respondents are asked to report their wage/salary before taxes and other deductions, and include tips, commissions and bonuses.
- 2. Employees who are members of a union and employees who are not union members but who are covered by a collective agreement or a union contract.
- 3. Employees who are not members of a union or not covered by a collective agreement or a union contract.
- 4. A permanent job is one that is expected to last as long as the employee wants it, given that business conditions permit. That is, there is no pre-determined termination date.
- 5. A temporary job has a predetermined end date, or will end as soon as a specified project is completed. Source: Statistics Canada, Labour Force Survey, 1998 to 2008.
 - Average hourly wage growth was strong for both women and men between 1998 and 2008.
 Unionized workers continued to enjoy hourly wages that were higher than non-unionized workers. In 2008, unionized employees' hourly wages were about 23% higher than their non-unionized counterparts.
 - In 1998, women's average hourly wages were about 81% of men's. By 2008, the average hourly wage ratio was 84% as the gap decreased. However, the size of the wage gap differed by union status. For example, women who were unionized employees had average hourly wages that were about 94% of men's in 2008 compared to 80% in 1998. The gap between women's and men's hourly wages was larger if employees were non-unionized. In 2008, non-unionized women average hourly wages were \$17.48 compared to \$22.24 for men who were non-unionized jobs, the wage ratio remained largely unchanged at 78% in 1998 and 79% in 2008.
 - Temporary employees' average hourly wages were less than the wages of permanent workers at an average of \$16.59 per hour in 2008 compared to \$21.98 for permanent employees. The hourly wage ratio between women and men who were temporary workers was 92%, meaning that for every dollar earned by a man, a woman earned 92 cents. This ratio was unchanged from 1998.



Table 3 Registered pension plans and members, by sex and type of plan, Canada, 2004 to 2008

	2004	2005	2006	2007	2008
		r	umber		
All RPPs ¹	14,777	15,336	15,130	18,594	19,185
All members	5,589,799	5,670,684	5,690,580	5,768,280	5,908,633
Men	2,959,631	2,976,031	2,977,758	2,973,239	3,039,988
Women	2,630,168	2,694,653	2,712,822	2,795,041	2,868,645
Defined benefit plans	7,014	7,561	7,611	11,056	11,539
Members	4,557,331	4,605,601	4,600,581	4,590,805	4,538,192
Men	2,350,783	2,347,405	2,337,151	2,282,930	2,251,795
Women	2,206,548	2,258,196	2,263,430	2,307,875	2,286,397
Defined contribution plans	7,507	7,485	7,196	7,160	7,165
Members	876,559	885,840	893,403	899,540	935,236
Men	521,157	524,102	525,998	534,214	553,361
Women	355,402	361,738	367,405	365,326	381,875
Hybrid plans ²	31	32	16	15	14
Members	49,407	15,461	11,351	11,337	16,881
Men	24,300	9,938	6,198	6,194	8,663
Women	25,107	5,523	5,153	5,143	8,218
Composite or combination plans ³	173	161	150	144	140
Members	64,812	96,781	92,265	140,862	151,150
Men	39,523	52,126	52,387	75,986	82,015
Women	25,289	44,655	39,878	64,876	69,135
Defined benefit and contribution					
plans ⁴		38	90	145	249
Members		17,583	40,057	79,760	201,895
Men		12,628	23,118	46,895	106,796
Women	.,	4,955	16,939	32,865	95,099
Other types of plans	52	59	67	74	78
Members	41,690	49,418	52,923	45,976	65,279
Men	23,868	29,832	32,906	27,020	37,358
Women	17,822	19,586	20,017	18,956	27,921

^{1.} Registered pension plans are plans established by either employers or unions to provide retirement income to employees.

Note: As of January 1.

Source: Statistics Canada, CANSIM table 280-0016.

- There were more than 19,000 private and public pension plans in Canada in 2008—60% of these plans were defined benefit plans—up from 47% of plans in 2004
- In 2008, women made up about one-half of the 4.5 million members of defined benefit pension plans.
- There were about 7,200 defined contribution plans in Canada in 2008 down from around 7,500 in 2004. The majority (59%) of defined contribution plan members were men.

^{2.} Hybrid plans are plans where the pension benefit is the better of that provided by defined benefit or defined contribution

^{3.} In composite or combination plans, the pension has both defined benefit and defined contribution characteristics.

^{4.} These plans may be for different classes of employees or one benefit type may be for current employees and the other for new employees.

Table 4 Proportion of labour force and paid workers covered by a registered pension plan, by sex, Canada, select years

	1992	1997	2002	2007
		n	umber	
RPP ¹ members				
Both sexes	5,244,703	5,088,455	5,522,563	5,908,633
Men	3,024,770	2,841,608	2,960,525	3,039,988
Women	2,219,933	2,246,847	2,562,038	2,868,645
		per	centage	
Labour force				
Both sexes	36.2	33.5	33.1	32.6
Men	37.6	34.1	32.9	31.7
Women	34.4	32.7	33.3	33.7
Paid workers				
Both sexes	45.3	41.6	39.7	38.3
Men	48.3	42.9	40.2	37.7
Women	41.8	40.1	39.2	38.8

^{1.} Registered pension plans are plans established by either employers or unions to provide retirement income to employees.

Notes: The data used from Labour Force Survey (Jabour force and paid workers) are applied averages to which the number of

Notes: The data used from Labour Force Survey (labour force and paid workers) are annual averages to which the number of Canadian Forces members was added.

Paid workers refer to employees in the public and private sector and include self-employed workers in incorporated business (with and without paid help).

Source: Statistics Canada, Pension Plans in Canada and Labour Force Survey.

- Roughly one-third of the labour force is covered by a registered pension plan (RPP). Between 1992 and 2007, RPP coverage dropped for both men and women. Men, however, experienced a more precipitous decline than women such that by 2007 women in the labour force were slightly more likely than men to be covered by an RPP.
- Among paid workers, RPP coverage declined from about 45% in 1992 to 38% in 2007.
 Coverage for men who were paid workers declined by about 11 percentage points and by 3 percentage points for women over the 1992 to 2007 period.



Table 5 Registered retirement savings plan contributions, by sex, Canada, 2000 to 2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
					number				
Total RRSP ¹ contributors	6,291,170	6,241,050	5,991,440	5,948,340	6,002,350 percentage	6,135,980	6,196,050	6,292,480	6,178,900
Men	55	55	54	54	54	54	54	54	53
Women	45	45	46	46	46	46	46	46	47
				in tl	housands of d	ollars			
Total RRSP									
contributions	29,280,163	28,438,914	27,072,812	27,561,305	28,788,102 percentage	30,581,252	32,350,792	34,057,715	33,314,040
Share of tota	al contributio	ons							
Men	61	62	61	62	62	62	62	61	61
Women	39	38	39	38	38	38	38	39	39
					dollars				
Median									
contribution	2,700	2,600	2,500	2,600	2,600	2,630	2,730	2,780	2,700
Men	3,000	3,000	3,000	3,000	3,000	3,070	3,200	3,260	3,220
Women	2,200	2,200	2,100	2,100	2,200	2,180	2,250	2,300	2,240

^{1.} Registered retirement savings plan.

Source: Statistics Canada, CANSIM table 111-0039.

- There were approximately 6.2 million Canadians who contributed more than \$33 billion to an RRSP in 2008.
- Almost half (47%) of all RRSP contributors in 2008 were women, up from 45% in 2000.
- The median RRSP contribution was \$2,700 in both 2000 and 2008. However, the median contribution for men was higher than that of women over the 2000 to 2008 period. For example in 2008, the median RRSP contribution for men was \$3,220 compared to \$2,240 for women.
- Although women made up almost half of all RRSP contributors, their share of total contributions was lower. In both 2000 and 2008, RRSP contributions made by women made up 39% of total contributions (61% for men).

An exploration of cultural activities of Métis in Canada

by Mohan B. Kumar and Teresa Janz

Introduction

Canada is a multicultural country. One rich source of our cultural heritage comes from Aboriginal Peoples. While cultural diversity can bring challenges, when we attempt to understand our own and others' cultural backgrounds it can provide tremendous opportunities for both personal growth and 'positive social evolution'. A better understanding of another person's culture can broaden our understanding of other ways of 'being' in the world, and help decrease the potential for misunderstandings.

But what does 'culture' mean? In a summary of some of the research on culture, Matsumoto and Juang describe how this term is used very broadly in everyday language and research, and can refer to activities and behaviours, history or heritage, and norms or organizational structures that govern behaviour.³ It may also touch many aspects of our lives including our food and clothing, individual and family activities, music and spirituality.

While there is no single agreed-upon definition of culture, one definition suggests culture is "a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life." However, this definition fails to recognize that for many Aboriginal individuals culture cannot be defined on its own, as a separate entity, but

instead culture is life itself—an all-encompassing concept. ^{5,6} As a result, culture may have an impact on the health and well-being of Aboriginal individuals.

One way the link between culture and well-being has been investigated is through 'cultural continuity.' The transmission of cultural heritage from one generation to another along with the means by which transmission occurs constitute cultural continuity. Research on cultural continuity has indicated that culture is important because it can foster personal identity development and contribute to psychological health, preventing self-destructive and suicidal behaviours. 8.9

To date, cultural continuity research with respect to Aboriginal people has primarily focused on First Nations communities and has been described as the connection that individuals have with their own cultural past, and ideas of their potential future self. 10 Several factors can contribute to cultural continuity, including Aboriginal language knowledge, land claims, self-government, availability of cultural facilities, and the provision of culturally appropriate education, health, police and fire services. First Nations communities that cultivate cultural continuity foster strong personal self-continuity in their youth, or the sense of personal persistence over time, which is protective against self-harm behaviours. 11,12 However, little research on cultural continuity has been done for the Métis population.

While 'culture' means many things to many people, this report explores only a few elements as they relate to the Métis population—which includes an estimated 389.785 individuals who identified themselves as Métis in the 2006 Census. For this article, cultural elements are limited to questions that were asked on the 2006 Aboriginal Peoples Survey and Métis Supplement (See "What you should know about this study"). The goal of this article is to explore current cultural activities of the Métis population, and move toward a better understating of Métisspecific cultural continuity. More specifically, this includes discussions of participation in traditional activities (e.g., hunting, fishing, trapping and gathering wild plants), arts and crafts, and attendance at Métisspecific organizations and cultural events, as well as consumption of traditional foods, and spiritual and religious practices. Aboriginal language acquisition and use are also examined.

Fishing a common activity among Métis

Historically, Métis have been involved in traditional activities such as fishing, hunting and trapping. ^{13,14} Métis also played a prominent role in the fur trade. ¹⁵ To this day, many Métis continue to fish, hunt and trap. ¹⁶

Fishing is a common traditional activity among the Métis. In 2006, about 40% of the adult Métis population had fished in the last 12 months. Most Métis fished for

What you should know about this study

About the Aboriginal Peoples Survey and Métis **Supplement Questionnaire**

The 2006 Aboriginal Peoples Survey (APS) provides an extensive set of data about Métis, Inuit and off-reserve First Nations adults 15 years of age and over and children aged 6 to 14, living in urban, rural and northern locations across Canada. The Aboriginal Peoples Survey was conducted between October 2006 and March 2007. Personal interviews were conducted in Inuit communities, the Northwest Territories (except for Yellowknife) and in other remote areas, while telephone interviews were conducted elsewhere. The overall response rate for the Aboriginal Peoples Survey was 80.1%.

This study focuses on the Métis population 15 and older. The Métis population includes those who reported identifying as Métis (either as a single response or in combination with North American Indian and/or Inuit). Data in this study are for the off-reserve Métis population only except for those living in the three territories where the on-reserve population is included. Also not included are those living in institutions.

The APS survey was developed by Statistics Canada in partnership with the following national Aboriginal organizations: Congress of Aboriginal Peoples, Inuit Tapiriit Kanatami, Métis National Council, National Association of Friendship Centres, and the Native Women's Association of Canada. The following federal departments sponsored the 2006 APS: Indian and Northern Affairs Canada, Health Canada, Human Resources and Skills Development Canada, Canada Mortgage and Housing Corporation and Canadian Heritage.

Métis supplement

The Métis supplement was designed specifically for the Métis population and it was given to people 15 years of age and older who identified themselves as Métis and/or who have Métis ancestry. The supplemental questionnaire was developed by Métis organizations in cooperation with Statistics Canada. This supplemental survey asks a wide variety of questions regarding family background, child welfare, social interaction, and health (for more information, please see the Aboriginal Peoples Survey 2006 and Métis Supplement, and Aboriginal Peoples Survey, 2006: Concepts and Methods Guide.

pleasure (87%) and/or for food (74%). Young Métis were more likely than their older counterparts to have fished. For example, 46% of 15- to 19-year-old Métis fished in the 12 months preceding the survey, compared to 24% of Métis 65 years and older (Chart 1). Métis women and Métis living in urban areas were less likely to have participated in this activity compared to men or those living in rural areas.

In 2006, 15% of all adult Métis had hunted in the previous 12 months and most stated that they hunted for food (89%) and/or for pleasure (64%). There were differences across regions and gender. About one-quarter of rural Métis hunted compared to 10% of urban Métis. About one in four Métis men had hunted compared to less than one in ten Métis women (data not shown).

While Métis in the past were extensively involved in trapping, in

2006 only 2% of Métis had trapped in the previous 12 months. There were no significant age differences among Métis who trapped in the last 12 months (Chart 1). Trapping was more likely to be carried out by Métis men and those living in rural areas. Among Métis who participated in trapping, their reasons included doing so for pleasure (52%), for food (45%), and for commercial purposes (39%).

Gathering wild plants

In 2006, nearly three in ten (29%) Métis indicated they had gathered wild plants (e.g., berries, wild rice or sweetgrass) in the previous 12 months. Those 65 and over (18%) were less likely to gather such vegetation compared to those younger (see Chart 1). Not surprisingly, Métis living in rural areas were more likely to have gathered wild vegetation compared to urban Métis (41% versus 25%). Métis men

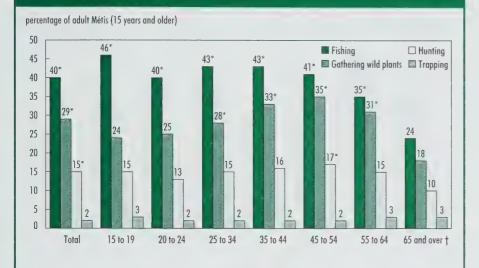
and women were equally likely to state that they had gathered wild vegetation.

Métis living in rural areas more likely to consume traditional foods than those living in urban

Consumption of traditional foods represents important ties to social and cultural aspects of life among Aboriginal people. 17,18 Among Métis, traditional foods and related activities have conventionally engendered stronger ties to Métis culture and community. 19 In the past, the sharing of wild meat and staple foods was commonplace in Métis communities.²⁰

In 2006, almost one in five Métis (17%) reported that they "often" consumed land-based animals (e.g. moose, caribou, bear, deer and buffalo), while 35% reported consuming such animals "a few times"

Chart 1 Fishing, the most common traditional activity among adult Métis in 2006



Age group

† reference group

in the year preceding the survey (Table 1).

Métis men (21%) were more likely to eat land-based animals "often" compared with women (14%). Rural-dwelling Métis (29%) were more than twice as likely to regularly eat land-based animals compared to urban Métis (13%). This is in line with the finding that Métis in rural areas are more likely to hunt compared to urban Métis.

Métis living in the Northwest Territories, Yukon, and Newfoundland and Labrador were more likely to have consumed land-based animals "often" compared to their counterparts in other provinces (Table 1).

Overall, about one in five Métis stated that they often consumed fresh water fish. Frequent consumption of fresh water fish was higher among older age groups and those living in rural areas. Similarly, older Métis consumed salt water fish more often than their younger counterparts.

In 2006, about 4% of Métis stated that they often consumed game birds and a smaller percentage (2%) often

Table 1 Percentage of Métis who consume traditional foods "often", Métis population aged 15 and over, by province, 2006

	Land-based animals 1	Fresh water fish	Salt water fish	Game birds	Small game	Berries or other wild vegetation	Bannock
			р	ercentage			
Canada †	17	19	13	4	2	17	12
Newfoundland and Labrador	32*	28*	35*	15* ^E	12* ^E	21	6*E
Prince Edward Island	Χ	Х	Х	χ	Χ	Х	Х
Nova Scotia	10*E	13 [£]	40*	Χ	F	26*	Χ
New Brunswick	13 ^E	13 [£]	29*	Х	Χ	28*	Χ
Quebec	16	28*	23*	9*	3*€	23*	4*
Ontario	16	23*	11	6	2 ^E	22*	5*
Manitoba	16	20	6*	4	2 ^E	12*	16*
Saskatchewan	24*	19	5*	4	3 E	16	25*
Alberta	17	14*	10*	2*] * E	13*	18*
British Columbia	15	15*	22*	1 * E	Χ	16	9*
Yukon	41*	32*E	14 ⁸	Х	χ	23 ^E	23* ^E
Northwest Territories	44*	33*	4 * E	12*E	6*E	22	31*

† reference group

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

 $^{^{*}}$ statistically significant difference from reference group at p < 0.05 for the same activity Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

^{*} statistically significant difference from reference group at p < 0.05

Land-based animals such as moose, caribou, bear, deer, buffalo, etc.

consumed small game like rabbit or muskrat. Not surprisingly, those living in rural areas were more likely to have consumed these animals "often". For example, about one in ten Métis living in rural areas often consumed game birds compared with 3% of those living in urban areas.

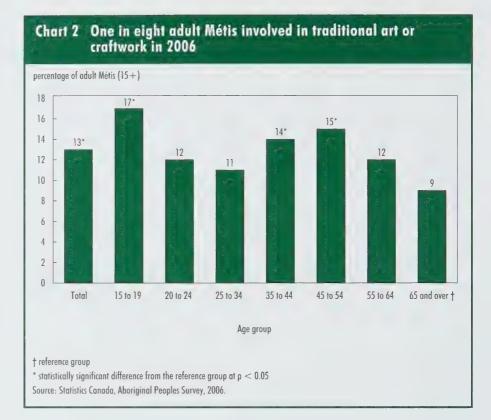
In the year prior to the survey, nearly one in five (17%) Métis had often consumed berries or other wild vegetation (e.g., wild rice), and about one in ten (12%) had often consumed bannock or fried bread (Table 1).

Young Métis more likely to be involved in traditional arts and crafts than older Métis

Arts and crafts have traditionally been a part of cultural and economic activities undertaken by Métis.²¹ These have included making clothing, needlework, toys,²² beadwork, quillwork and embroidery.²³

In 2006, 13% of all adult Métis (15 years and older) were involved in traditional art or craftwork. There were significant differences across the age groups. Younger Métis were more likely to be involved compared to older Métis. For instance, Métis between the ages of 15 and 19 years were more likely to be involved in creating traditional arts and crafts (17%) than those who were 65 years and older (9%) (Chart 2).

The most common types of art or craftwork reported by Métis included beadwork (33%), painting (18%) and leatherwork (14%). In general, Métis women were more likely to be involved in arts and crafts activities than Métis men (16% versus 10%). However, some of these activities are highly gendered so it is not surprising that there were significant gender differences in certain types of activities. Métis women were more likely to be involved in beadwork (44% versus 14%) and sewing (11% versus 5%) than men. On the other hand, men were more likely to carve (18% versus 4%) and do woodwork (12% versus 3%) than women. Genderspecific differences were not seen for leatherwork, pottery, weaving, sculpting, painting or embroidery.



Attendance at Métis cultural events more common in the Northwest Territories, Manitoba and Saskatchewan

Many Aboriginal people maintain connections with their spirituality, traditions and culture through participation in powwows, sweat lodges, social and political Aboriginal organizations, and other traditional activities. While there is some evidence of Métis practices to maintain cultural, 24,25 social, and political ties^{26,27} through celebrations (Métis Nation Day, Chivaree, Louis Riel Day²⁸), little information is available for Métis across Canada today. To begin to address this knowledge gap, the following sections explore Métis participation in cultural, social and political organizations, including religious and spiritual practices.

In 2006, about one-quarter (26%) of all Métis in Canada reported attending a Métis event (cultural event, festival pilgrimage, or Métis artist performance) in the previous 12 months. One in five (18%) Métis

had attended a Métis event five or more years ago. In contrast, about 30% of all Métis in Canada had never attended a Métis event. Attendance was higher in some jurisdictions. Just over 40% of all Métis living in the Northwest Territories had attended a Métis cultural event in the last 12 months compared to about 35% in Saskatchewan and Manitoba.

Those age 35 and older more likely to be members of Métis organizations

In 2006, (17%) of Métis aged 15 and older indicated that they were members of Métis cultural, social or political organizations. Métis adults were more likely to be members if they were 35 years of age and older (20%) compared to those between 15 and 34 years of age (12%). Likewise, Métis living in rural areas were more likely to be members of Métis organizations compared to urban Métis (data not shown). Among members, 27% regularly participated in activities or meetings for these organizations (Chart 3). Those aged

25 to 34 were the least likely of all the age groups to regularly participate (15%).

Many Métis adults very or moderately spiritual or religious

People may also participate in spiritual or religious activities in order to feel connected to their community. Spirituality and religiosity are a large part of maintaining optimal holistic health and well-being among many Métis.²⁹ Many Métis have combined traditional Aboriginal spiritualism and Roman Catholicism.³⁰ For example, about one in five Métis (21%) consider themselves to be "very" spiritual or religious and another (43%) consider themselves to be "moderately" spiritual or religious. At the other end of the scale, about one in five Métis do not consider themselves to be very spiritual or religious, and another one in ten indicated they were not at all spiritual or religious.

The spiritual and religious practices of Métis are diverse. For example, some Métis maintain their religious or spiritual well-being through prayer (36%), attending church (30%), meditation (20%), talking with elders (15%), participating in pilgrimages (5%), or attending sweat lodges 4%. Just over 20% of all Métis used some "other" means of maintaining religious/spiritual well-being.

Cree the predominant Aboriginal language spoken among Métis

Aboriginal language knowledge has been used as one measure of cultural continuity. The Métis people from the Prairies have traditionally spoken many First Nation languages and the distinct language, Michif, which is a composite language derived from French and Cree. ^{31,32} The use of these languages is said to help foster the relationship between Métis and the land, water and food. ³³

According to the 2006 Aboriginal Peoples Survey (APS), 10% of Métis aged 15 years and older spoke an Aboriginal language. All Métis who spoke an Aboriginal language also

spoke at least one official language: 88% spoke English, 1% French, and 11% both English and French.

While only a minority of Métis in 2006 spoke an Aboriginal language, many viewed learning, re-learning and keeping their Aboriginal language as important. In 2006, 48% of Métis adults indicated that learning, relearning or keeping their Aboriginal language was "very" or "somewhat" important to them. Many Métis (39%) also indicated that it was "very" or "fairly" important for their children to learn an Aboriginal language.

Among the Métis who spoke an Aboriginal language, Cree was most predominantly spoken at 64%, followed by Ojibway (10%) and Michif (7%).

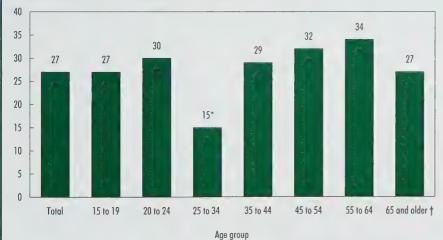
Nearly one-quarter of Métis in Saskatchewan speak Aboriginal languages

In 2006, the largest proportion of Métis adults who spoke an Aboriginal language was in Saskatchewan (24%), significantly more than the 16% in Alberta. In Manitoba and British Columbia, about the same proportion of Métis adults spoke an Aboriginal language (8% and 6% respectively).

There were also significant regional differences in the Aboriginal languages spoken by Métis across Canada (Chart 4). For example, almost all (87%) Alberta Métis who could speak an Aboriginal language spoke Cree, while in Saskatchewan and British Columbia more than six in ten spoke Cree. In Manitoba, there were no statistically significant differences in the likelihood of Métis speaking Cree (48%) or Ojibway (32%). In Ontario, the predominant language among those who could speak an Aboriginal language was Ojibway (46%) compared to 17% who spoke Cree.

In 2006, those living in urban and rural areas were equally likely to report that they could speak an Aboriginal language. However, Métis living in rural areas who spoke an Aboriginal language were more than twice as likely to report that they





† reference group

 * statistically significant difference from reference group at p < 0.05

1. Regular participation is defined as participating in meetings or activities "at least once a week", "at least once a month" or "at least 3 or 4 times a year."

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.



t reference group

* statistically significant difference from reference group at p < 0.05

Notes: Percentages for Aboriginal languages are not presented for the Atlantic provinces or the Yukon Territory because the samples were too small.

Percentage may not add to 100 because some categories were suppressed to protect confidentiality.

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

spoke that language "very well" compared to those living in urban areas (32% versus 14%).

Older Métis more likely to speak an Aboriginal language, and likely to speak it well

In general, among Métis adults under the age of 65, around one in ten stated that they spoke an Aboriginal language. Métis over 65 years of age were more likely to speak an Aboriginal language (16%).

Among younger Métis (15 to 19 years) who could speak an Aboriginal language, 18% reported speaking it "very well" or "relatively well." A significantly higher percentage of Métis 65 and older who could speak an Aboriginal language said they could speak "very well" or "relatively well" (67%).

Summary

Canada's Aboriginal people have a rich and culturally diverse heritage. Examining some aspects of Métis culture can provide opportunities to better understand and gain an appreciation for the culture of a distinct group of people within the Aboriginal population.

This article explores potential Métis cultural continuity indicators like participation in traditional activities including hunting, fishing and trapping, and Aboriginal language knowledge.

Among traditional hunting and gathering methods, fishing was the most predominant activity. About 40% of Métis had fished during the year leading up to the survey and about 10% had hunted.

Métis also participated in other traditional activities, such as gathering wild vegetation, and creating traditional arts and crafts. Beadwork and painting were the more popular traditional arts and crafts among Métis.

About one-quarter of the adult Métis population had attended a Métis cultural or social event and about 20% were members of Métis cultural, social or political organizations.

Across Canada, one in ten Métis spoke an Aboriginal language. The most commonly spoken Aboriginal language for Métis varied by region: in Alberta, Saskatchewan and British Columbia it was Cree; in Manitoba it was Cree and Ojibway; and in Ontario it was Ojibway.

The findings also highlight that any discussion of 'common' cultural activities has to occur in a context that considers the individual's background. For example, Métis who created traditional arts and crafts were more likely to be young, while older Métis were more likely to be members of Métis organizations and speak an Aboriginal language. In addition, a more in-depth exploration of arts and crafts indicated that some of these activities were gendered with beadwork being common among women, and carving and woodwork common among men.



Mohan B. Kumar and Teresa Janz are analysts with the Social and Aboriginal Statistics Division. Mohan B. Kumar is also a research officer at the Métis Centre of the National Aboriginal Health Organization.

- There are three distinct groups of Aboriginal peoples in Canada, as defined by the 1982 Constitution Act. These are the Indian, Inuit and Métis peoples of Canada. According to the 2006 Census, an estimated 389,785 people identified themselves as Métis, accounting for onethird (33%) of Aboriginal people.
- 2. Matsumoto, D. and Juang, L. (2008). Culture and Psychology. 4th edition. Belmont, CA. Thomson Wadsworth.

- 3. Ibid.
- 4. Matsumoto and Juang. (2008).
- Louis Riel Institute. (2005). Culture: Strategic Directions 2005-2008. http://www.louisrielinstitute.com/culture/ (accessed January 10, 2010).
- Vizina, Y. (2008). Métis Culture. Regina. Saskatchewan council for archives and archivists. http://scaa.sk.ca/ourlegacy/ exhibit_metisculture (accessed January 10, 2009).
- Eggan, D. (1956). "Instruction and affect in Hopi cultural continuity." Southwestern Journal of Anthropology. 12, 347-366.
- 8. Chandler, M.J. and Lalonde, C. (1998)."Cultural continuity as a hedge against suicide in Canada's First Nations."

 Transcultural Psychiatry. 35, 191-219.
- Hallett, D., Chandler, M.J. and Lalonde, C.E. (2007). "Aboriginal language knowledge and youth suicide." Cognitive Development. 22, 392-399.
- Chandler, M.J., Lalonde, C.E., Sokol, B.W. and Hallett, D. (2003). "Personal persistence, identity development, and suicide: A study of Native and Non-native North American adolescents.' Monogr Soc Res Child Dev. 68, vii-viii, 1-130. Discussion 131-138.
- 11. Chandler and Lalonde. (1998).
- 12. Hallett, Chandler and Lalonde. (2007).
- Stranger, S. and Daniels, D. (1977).
 Lifestyles: Manitoba Indians. Winnipeg.
 Manitoba Indian Cultural Education
 Centre.
- Pelletier, E. (1977). A Social History of the Manitoba Métis. Winnipeg. Manitoba Métis Federation Press.
- 15. Ray, A.J. (1998). Indians in the Fur Trade: Their Roles as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870. Toronto. University of Toronto Press.
- 16. Edge, L. and McCallum, L. (2006). Métis Identity: Sharing Traditional Knowledge and Healing Practices at Métis Elders' Gatherings. Pimatisiwin 4 #2.
- Richmond, C. A. M. and Ross, N. A. (2009). The Determinants of First Nation and Inuit health: A Critical Population Health Approach. Health and Place, 15(2).
- 18. Freeman, M.M. R. and Canadian Circom-Polar Institute (2003). Food for Thought (and Other Important Considerations). Paper presented at the conference Indigenous Peoples' Contributions to Understanding Global Environmental Change. Montreal. McGill University.

- 19. Edge and McCallum, (2006).
- Hourie, A., Barkwell, L., Carriere-Acco, A. and Dorion, L. (2006). "Métis Foods and Food Preparation." Métis Legacy II.
 L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
- 21. Barkwell, L. (2006). "Making a living." Métis Legacy II. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
- 22. Heritage Community Foundation. (2009). The Métis in Alberta. http://www.albertasource.ca/METIS/ENG/culture_lifeways/culture_lifeways_arts_crafts.htm (accessed August 10, 2009).
- 23. Barkwell. (2006).
- 24. Hourie, Barkwell, Carriere-Acco, and Dorion. (2006).
- 25. Barkwell, L. and Hourie, A. (2006). "Métis Games.» Métis Legacy II. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
- 26. Edge and McCallum. (2006).
- 27. Dorion, L. and Prefontaine, D.R. (2001). "Deconstructing Métis historiography: Giving voice to the Métis people." Métis Legacy. L.J. Barkwell, L. Dorion and D.R. Prefontaine (eds.) Louis Riel Institute and Gabriel Dumont Institute of Métis Studies and Applied Research. Manitoba. Pemmican Publications Inc. 22-25.
- 28. Barkwell, L. (2006). "Métis holidays and celebrations." Métis Legacy II. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
- 29. Barkwell, L., Prefontaine, D.R. and Carriere-Acco, A. (2006). "Métis spirituality." Métis Legacy II. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
- 30. Barkwell et al. (2006).
- 31. Dorion and Prefontaine. (2001).
- 32. Bakker, P. (2001). "The Michif Language of the Métis." Métis Legacy. L.J. Barkwell, L. Dorion and D.R. Prefontaine (eds.). Manitoba. Pemmican Publications Inc., Louis Riel Institute and Gabriel Dumont Institute of Métis Studies and Applied Research. 177-179.
- 33. Edge and McCallum. (2006).

A portrait of couples in mixed unions

by Anne Milan, Hélène Maheux and Tina Chui

Introduction

As Canada's population continues to become more ethnoculturally diverse, there is greater opportunity for individuals to form conjugal relationships with someone from a different ethnocultural background. These mixed unions. either marital or common-law. can be measured in many ways. For example, mixed unions may refer to spouses or partners with differing sociodemographic or cultural characteristics such as age, education, religion or ethnic origin. In this study, a mixed union is based on one of two criteria: either one member of a couple belongs to a visible minority group and the other does not, or the two spouses or partners belong to different visible minority groups.

Using data primarily from the 2006 Census of Population, this study examines the characteristics of mixed union couples in Canada (see "What you should know about this study" for concepts, definitions and details). The prevalence of mixed unions may vary for particular visible minority groups and according to factors such as immigration status, generation status and birthplace. Sociodemographic attributes such as age, sex, marital status and place of residence within Canada, as well as socio-economic characteristics including education, labour force participation and family income will be explored in order to see if they are associated with being in a mixed union. Possible implications of mixed unions include linguistic transfer

and trends related to children living in mixed families. Studying mixed unions is important not only because these relationships reflect another aspect of the diversity of families in Canada today, but also because of their potential impact in terms of social inclusion and identification

with one visible minority group or more, particularly for subsequent generations.

About 4% of all couples are mixed unions

According to the 2006 Census, 3.9% of the 7,482,800 couples in Canada

What you should know about this study

Visible minority status

Visible minority status is self-reported and refers to the visible minority group to which the respondent belongs. The Employment Equity Act defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour." Under this definition, regulations specify the following groups as visible minorities: Chinese, South Asians, Blacks, Arabs, West Asians, Filipinos, Southeast Asians, Latin Americans, Japanese, Koreans and other visible minority groups, like Pacific Islanders.

Mixed couples refer to common-law or marital relationships comprised of one spouse or partner who is a member of a visible minority group and the other who is not, as well as couples comprised of two different visible minority group members. Mixed couples include both opposite-sex and same-sex couples unless indicated otherwise.

Data used are primarily from the 2006 Census of Population, with comparisons to 2001 data where appropriate. Throughout the paper, both person-level and couple-level data are used.

Person-level data are used for characteristics of individuals in mixed unions, such as age, sex, educational level, immigrant status and mother tongue.

Couple-level data are more appropriate when analyzing characteristics of the union, for instance, whether it is a marriage or common-law relationship or if there are children present in the home.

Persons of multiple visible minority group status are individuals who reported belonging to more than one visible minority group by checking two or more mark-in circles on the census questionnaire, e.g., Black and South Asian.

were mixed unions. Mixed unions between one visible minority group member and one non-member or between persons belonging to two different visible groups accounted for 289,400 couples overall. In comparison, mixed unions represented 3.1% of all couples in 2001 and 2.6% in 1991. Between 2001 and 2006, mixed unions grew at a rapid pace (33%), more than five times the growth for all couples (6.0%). There are several reasons why the proportion of mixed unions may be increasing. For example, there could be more mixed unions as people meet, interact and form relationships in many different social, educational or work-related settings. The growth of mixed unions may also be due to an increasing number of people who belong to visible minority groups, resulting in greater potential for people to meet spouses or partners from outside their group.

Visible minority population increased more than threefold in 25 years

The increase in mixed unions in Canada may be at least partially attributed to the growth of the visible minority population. The 2006 Census counted 5.1 million persons who were members of visible minority groups, representing more than 16% of the population of Canada.² This figure is more than three times higher than in 1981, when the visible minority population accounted for 4.7% of Canada's total population. The changing face of Canada can be largely attributed to the greater proportion of immigrants coming from regions other than Europe. For example, 84% of immigrants who arrived in Canada in the five-year period between 2001 and 2006 were born in non-European countries, up from 68% of recent immigrants counted 25 years earlier.

Given that most of the Canadian population was not part of a visible minority in 2006 (84%), the majority of mixed unions were between persons who belonged to a visible

minority group paired with persons who were not a visible minority group member (247,600 or 3.3% of all couples in 2006), a growth of 31% since 2001. An additional 41,800 couples were comprised of members of two different visible minority groups, accounting for 0.6% of all couples, up almost 50% from five years earlier.

Japanese have highest proportion of out-group pairings

While nearly one-quarter (24%) of all couples comprised of at least one visible minority group member were mixed in 2006, the proportion varied according to the particular visible minority group. There are many reasons that could explain the variation in mixed unions among the visible minority groups, like the size of the group, which could affect the chance of its members finding a partner with the same background,

the group's immigration history as well as other characteristics. The share of couples who were mixed increased slightly for some visible minority groups from 2001 to 2006, while the ranking of the proportion of mixed couples by visible minority group membership remained unchanged for both census years.

Japanese had the highest proportion marrying or partnering outside of their visible minority group, as shown in the 2006 Census. Indeed, about three-quarters (75%) of the 29,700 couples where at least one person in the couple was Japanese involved pairings with a non-Japanese person. As was noted in earlier research,³ this high proportion may be at least partially due to the long duration of residence for many Japanese in Canada, as well as the low overall number of Japanese, which could increase interaction with persons outside of their group.

Table 1 Out-group pairing by visible minority group, 2006

	Couples				
	Total	Mixed union	Same visible minority group		
	number percentage				
Visible minority group					
All visible minority groups ¹	1,214,400	23.8	76.2		
Japanese	29,700	74.7	25.3		
Latin American	85,200	47.0	53.0		
Black	136,000	40.6	59.4		
Filipino	107,400	33.1	66.9		
Southeast Asian	58,100	31.1	68.9		
Arab/West Asian	105,700	25.0	74.9		
Korean	34,800	19.5	80.5		
Chinese	321,700	17.4	82.6		
South Asian	327,200	12.7	87.3		
Multiple groups or n.i.e. ²	50,400	58.4	41.6		

The number of couples by specific visible minority group does not sum to the total because if the two
persons in a couple belong to two different visible minority groups, these couples are counted in each
aroup.

Belonging to multiple visible minority groups means that respondents reported more than one visible
minority group by checking two or more mark-in circles, e.g., Black and South Asian. Less common visible
minority groups are reported in the visible minority n.i.e. (not included elsewhere) category. This category
includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan,
Polynesian and Pacific Islander.

Latin Americans (47%) and Blacks (41%) followed Japanese with the highest proportions of couples involving out-group pairings. About one-third of couples involving a Filipino (33%) were married or living common-law outside their visible minority group. The proportions of mixed unions among Southeast Asians (31%), Arabs or West Asians (25%) or Koreans (19%) ranked somewhat in the middle of all visible minority groups (Table 1).

The two largest visible minority populations in Canada had among the lowest proportions married or partnered outside their groups. In 2006, there were 1.3 million South Asians and 1.2 million Chinese living in Canada.4 However, because the South Asian population includes a higher number of children under the age of 15 compared to the Chinese population, when considering the adult population (those aged 15 and over) only, Chinese becomes the largest visible minority group. With more than 1 million Chinese in this age group, they also had one of the lowest proportions of mixed unions outside their group (17%).

South Asians aged 15 and older comprised the second largest visible minority group and were the least likely to form couples outside their group. Only about one in eight couples (13%) involving a South Asian person also included a non-South Asian partner or spouse. Given the size of the Chinese and South Asian populations, there might be more opportunities to establish dynamic communities which would result in a greater likelihood to meet, interact and develop conjugal relationships with someone from the same visible minority group.

Although Chinese persons had a relatively low proportion that were married or living common-law outside their group, numerically there were more Chinese spouses or partners in mixed unions due to the sheer size of the Chinese population in Canada. In 2006, there were almost 56,000 Chinese paired with a non-visible minority or another visible minority group member, followed closely by

Blacks (55,200). In contrast, couples comprised of one Japanese person had the highest proportion of outgroup marriage or partnership, but this accounted for only 22,200 Japanese due to the small size of this population group. The group with the lowest number of persons in mixed unions was Koreans (6,800) (Table 2).

Taken as a whole, men and women who belonged to visible minority groups and were in couples were equally likely to be in a mixed union couple. However, within the various minority groups, there were some differences. For example, Arab or West Asian, Black or South Asian men who were in couples had higher proportions of mixed unions compared to women from these groups. In 2006, there were more than twice as many Arab or West Asian married or partnered men who were paired outside their group (19%) as there were women (9%). Similarly, three in ten Black men in couples were in mixed unions as were two out of ten Black women. This supports research out of the United States that

Table 2 Persons in couples and in mixed unions by visible minority group, 2006

	Persons					
	Total In a couple			In a mixed union		
	number	number	percentage	number	percentage	
Visible minority group						
All persons belonging to visible minority groups	3,922,700	2,181,200	55.6	331,300	15.2	
Chinese	1,005,600	587,500	58.4	56,000	9.5	
Black	562,100	216,800	38.6	55,200	25.5	
South Asian	957,600	612,800	64.0	41,500	6.8	
Latin American	244,300	130,300	53.3	40,000	30.7	
Filipino	320,900	179,200	55.9	35,600	19.8	
Arab/West Asian	321,800	185,000	57.5	26,500	14.3	
Japanese	66,400	37,200	56.0	22,200	59.7	
Southeast Asian	184,600	98,200	53.2	18,100	18.4	
Korean	114,600	62,800	54.8	6,800	10.8	
Multiple groups or n.i.e. ¹	144,700	71,400	49.3	29,400	41.3	

Less common visible minority groups are reported in the visible minority N.I.E. (not included elsewhere) category. This category includes respondents who reported a
write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander. Belonging to multiple visible minority groups means that respondents
reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian.
 Source: Statistics Canada, Census of Population, 2006.

has found that Black men were more frequently in mixed union couples than Black women.⁵

Filipino, Korean, Southeast Asian, Japanese, Chinese or Latin American women in couples accounted for a higher proportion of spouses or partners in mixed unions than did men from these visible minority groups. There were more than three times as many married or partnered Filipino women in mixed unions (28%) as there were Filipino men (9%). For Japanese, nearly two-thirds of Japanese women in couples were in mixed unions while this was the case for over one-half (52%) of men from this visible minority group (Chart 1).

Mixed unions higher for Canadian-born than foreign-born visible minority groups

Since people tend to migrate as adults, they may have already formed unions by the time they immigrate to Canada. Individuals born in Canada. on the other hand, would be more likely to form unions in this country. As such, Canadian-born visible minorities in couples had a higher proportion in mixed unions than their foreign-born counterparts. In 2006, among Canadian-born visible minorities in couples, 56% had a partner or spouse who was either a non-visible minority or was a member of a different visible minority group compared to 12% for those who were foreign-born (Table 3).

The proportion of visible minorities in couples that were mixed was higher for the Canadian-born compared to the foreign-born for each visible minority group, but there was some variation across groups. More than two-thirds of married or partnered Canadian-born Japanese were in mixed unions (69%), while this was the case for one-half (50%) of all Japanese in couples who were born outside the country. In fact, 48% of Japanese who were born in Japan and were in couples had formed an out-group conjugal union. In contrast, over onehalf (54%) of Chinese in couples who were born in Canada were in mixed

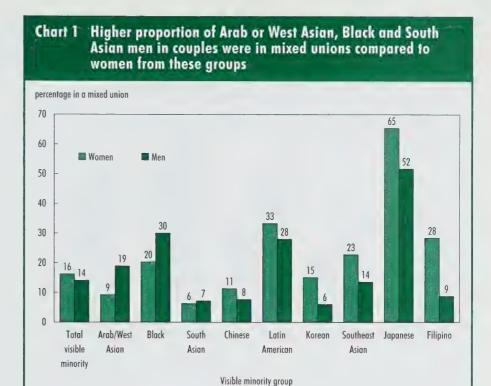


Table 3 Persons in mixed unions by place of birth and visible minority group, 2006

Persons in a mixed union Born outside Born in Total Canada Canada percentage Visible minority group All visible minority groups 15.2 55.6 12.1 59.7 68.8 50.0 Japanese Latin American 30.7 56.1 29.8 Black 25.5 63.0 18.1 19.8 18.0 Filipino 63.5 Southeast Asian 18.4 58.5 17.2 Arab/West Asian 14.3 40.5 13.1 Korean 10.8 62.6 9.2 9.5 6.2 Chinese 53 7 South Asian 6.8 5.5 34.7 41.3 76.0 37.3 Multiple groups or n.i.e.

Source: Statistics Canada, Census of Population, 2006.

Belonging to multiple visible minority groups means that respondents reported more than one visible
minority group by checking two or more mark-in circles, e.g., Black and South Asian. Less common visible
minority groups are reported in the category called visible minority n.i.e. (not included elsewhere). This
category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd,
Tibetan, Polynesian and Pacific Islander.

unions in 2006, whereas this was true for 6% of Chinese born outside the country. Among married or partnered Chinese who were born in China, only 3% were in mixed unions. Similarly, about one-third of Canadian-born South Asians in couples were in mixed unions, while 3% of South Asians born in South Asia were in mixed unions. Among Canadian-born Blacks in couples, 63% were in mixed unions while this was true for 17% of Blacks in couples born in the Caribbean and Bermuda, and 13% of African-born Blacks (Table 3).

Generational status and mixed unions

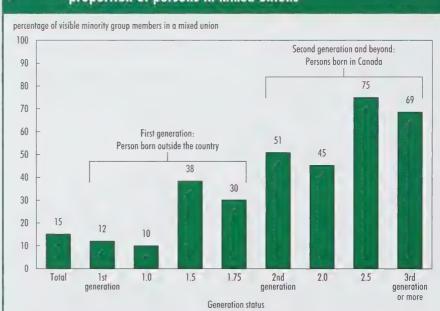
Generation status refers to the number of generations that individuals and their families have been in Canada and affects the degree to which these persons participate in mixed unions.6 Since individuals whose history in Canada could be traced back at least three generations made up the majority of the total population, the share of mixed unions decreased with each subsequent generation, that is, 7.5% of first-generation immigrants were in mixed unions, falling to 5.3% for the second generation and to 1.9% for the third or higher generation. At first glance, these results differ from a study of Asian couples in the United States and Canada which found that mixed unions were more likely among the second (or higher) generation,⁷ as well as a study conducted in the Netherlands which found a higher likelihood of out-group marriage among the second generation.8 It should be noted, however, that the decrease in the proportion of persons in mixed couples by generation status for the total population in couples is a function of the majority of this group not belonging to a visible minority group. When only the married or partnered visible minority population is considered, the proportion of persons in mixed unions increases from 12% for the first generation (meaning persons born outside of Canada) to over onehalf (51%) for the second generation (meaning these are persons born in Canada but with at least one parent born outside Canada). Finally for persons who are third generation or higher (meaning they, as well as both parents, were born in Canada), more than two-thirds (69%) of persons who belonged to a visible minority group and were in couples in 2006 were part of a mixed union. Consequently, a longer duration of residence in Canada does seem to be associated with a higher proportion of being in a mixed union (Chart 2).

For persons belonging to specific visible minority groups, the overall trend was to have a higher proportion of persons in couples that were mixed for the second and higher generations compared to the first generation. For example, among first-generation Chinese, 6.2% of persons in couples in 2006 were in mixed unions, rising to over one-half (51%) for second-generation Chinese, and to two-thirds for persons in the third or higher generation (67%). Roughly one-half of first- and second-generation Japanese

who were in couples were in mixed unions, increasing dramatically to 88% for individuals who were third generation or higher.

Since the census does not collect information on timing of union formation, it is not possible to determine whether these mixed unions began prior to entry into Canada for immigrants or subsequent to their arrival. However, age at immigration can provide an approximation as to whether foreign-born visible minorities immigrated to Canada while they were still children. Consequently, individuals who spent more of their childhood and adolescence in Canada may be more likely to form out-group conjugal relationships. Combining generation status and age at immigration shows a general trend for immigrants who entered Canada at 12 years of age or younger. These individuals had a higher percentage who were in mixed unions compared to those who arrived when they were 12 years of age or older. When the birthplace of the parents of persons born in

Chart 2 Longer history in Canada was associated with higher proportion of persons in mixed unions



Note: 1.0 = more than 12 years of age at immigration; 1.5 = between 6 and 12 years of age at immigration; 1.75 = less than 6 years of age at immigration; 2.0 = no parents were born in Canada; 2.5 = only one parent was born in Canada. Source: Statistics Canada. Census of Population. 2006.

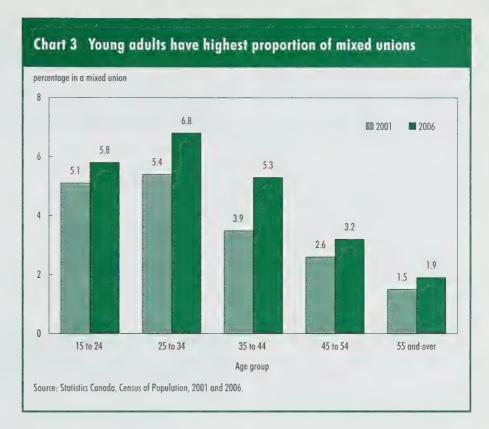
Canada was considered, there was a higher percentage of persons in mixed unions when only one parent was born in Canada (75%) compared to when neither parent was born here (45%). This overall upward trend could reflect greater interaction and integration with other groups the longer one spends in Canada.

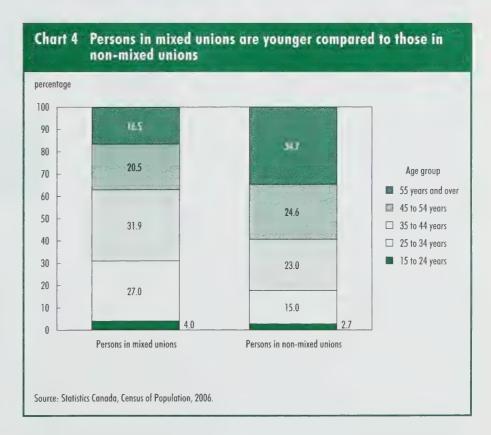
Persons in couples that are mixed unions are young and highly educated

Relationship formation is often associated with young adulthood and, in fact, among spouses and partners in 2006, the highest proportion of individuals in mixed unions occurred among 25- to 34-year-olds (6.8%), followed by individuals aged 15 to 24 years (5.8%). In the 55 and older category, only 1.9% of couples were in mixed unions. While the proportion of adults in mixed unions fell after age 34, all age groups showed an increase compared to 2001 (Chart 3).

When the distribution of married or partnered persons in mixed unions is compared with that of their counterparts in non-mixed unions, the largest percentage of mixed union spouses or partners was in the 35- to 44-year-old age group. Conversely, 35% of spouses or partners who were not in mixed unions were 55 years or older (Chart 4).

Being in a mixed union was also associated with other socio-economic characteristics like education. Only 1.8% of persons in couples with less than a high school education were in a mixed union, whereas this was the case for 4.8% of individuals with postsecondary education. In fact, among persons in couples who had a university degree, 6.4% were in mixed unions. Given that many visible minority group members are recent immigrants—who are generally more highly educated than the Canadianborn population—this could also be related to the tendency for persons in mixed unions to have higher levels of education. In addition, the university-educated population is, on





average, younger than the population overall, which would contribute to the association between higher education and being in a mixed union (Table 4).

Consequently, more than one in three (35%) persons in couples that were mixed unions had a university degree in 2006 as did one in five (21%) persons in non-mixed couples. Other studies also found that outgroup marriage is more likely for individuals with higher education levels (Chart 5).9

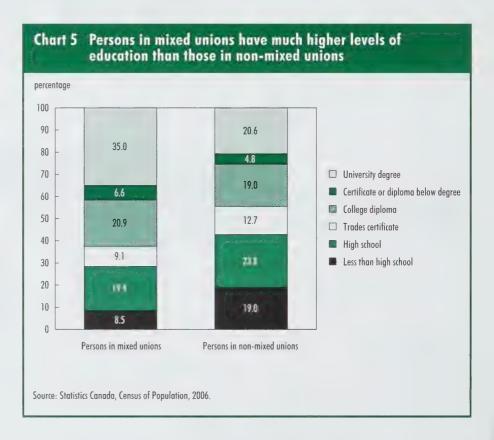
The labour force status of persons in mixed union couples is related to these higher education levels. A higher percentage of spouses or partners in mixed unions were employed (77%) compared to their counterparts in non-mixed couples (67%). Additionally, 19% of persons in mixed couples did not participate in the labour market compared with 30% of persons in non-mixed couples. Higher education and labour market participation rates were also linked to higher incomes for mixed union couples. Data from the 2006 Census show that the median census family income was nearly \$5,000 higher for couples in mixed unions (\$74,670) than for non-mixed couples (\$69,830).10 The lowest median income was for couples who belonged to the same visible minority group (\$53,710) and the highest was for couples in which one spouse or partner belonged to a visible minority group and the other did not (\$76,150). When neither member of the couple belonged to a visible minority group, the median census family income was \$72,070 (Table 5).

Mixed unions more predominant for common-law couples than for legally married couples

A higher proportion of couples living in a common-law arrangement than legally married couples were in mixed unions. About 4.9% of common-law couples were in mixed unions while this was true for 3.6% of couples in legal marriages. Recent research from the United States on Blacks in mixed unions also found that such

Table 4 Persons in couples that were mixed unions by highest level of education, 2006

	Persons in a mixed unio
	percentage
Highest level of education	
Total	3.9
Less than high school	1.8
High school graduate	3.2
Post-secondary education	4.8
Trades certificate	2.8
College diploma	4.2
Certificate or diploma below university degree	5.2
University degree	6.4



relationships were more likely to be common-law unions than marriages. ¹¹ In Canada, mixed couples comprised of one Black person had the highest proportion of unions that were common-law (32%). In contrast, mixed couples comprised of either Japanese or South Asian persons were least likely to be common-law. Nearly

one-quarter of all mixed unions in 2006 were common-law relationships compared to less than one-fifth of non-mixed couples.

The 2006 Census marked the first time data were collected on both same-sex married and commonlaw couples. 12 Although same-sex couples account for only a small

Table 5 Census family median income by mixed union status, 2006

	Median income
	dollars
Total couples	70,000
Mixed unions	74,670
Spouses or partners belong to different visible minority groups	66,080
One spouse or partner belongs to a visible minority group and the other does not	76,150
Non-mixed unions	69,830
Both spouses or partners belong to the same visible minority group	53,710
Neither spouse or partner belongs to a visible minority group	72,070

number of overall couples, 13 a higher proportion of same-sex couples were in mixed unions in 2006 compared to opposite-sex couples. Almost one in ten (9.8%) same-sex couples were in mixed unions compared to less than one in twenty (3.8%) opposite-sex couples. There currently may be a higher proportion of same-sex than opposite-sex mixed couples for two reasons: same-sex couples overall were more likely to be common-law than opposite-sex couples, and couples living common-law had a greater tendency to be in mixed unions compared to married couples. In fact, 10% of same-sex commonlaw relationships in 2006 were mixed couples, while this was the case for 8.4% of same-sex married couples. The corresponding figures for opposite-sex couples were 4.7% and 3.6%, respectively. Given the recent legalization of same-sex marriage, this pattern could possibly change in the future once more same-sex couples have the opportunity to marry. 14

S

Most couples in mixed unions in largest CMAs

The proportion of couples in mixed unions in 2006 was higher in three provinces than in the country as a whole. In British Columbia, 5.9% of couples were mixed unions, while the corresponding figure was 4.6% in

Ontario followed by 4.2% in Alberta. This is largely the result of the high number of couples in mixed unions living in the CMAs of these provinces. Of the 11 CMAs with proportions of couples in mixed unions that were higher than the national average, all but two (Montréal and Winnipeg) were located in these three provinces. 15

As a proportion of all couples, mixed unions can be viewed as an urban phenomenon, particularly in certain CMAs. Overall, 5.1% of couples who lived in CMAs in 2006 were in mixed unions. In contrast, among couples who lived outside a CMA, 1.4% were in a mixed union. However, when the percentage of mixed unions as a proportion of the visible minority population is examined, a different pattern emerges (see An alternative look at mixed unions and urban areas). The CMAs with the highest proportions of couples in mixed unions in 2006 were Vancouver (8.5%) and Toronto (7.1%). Calgary had the third highest proportion of couples in mixed unions (6.1%) (Table 6). While Vancouver and Toronto have long had large visible minority populations, Calgary had the fourth highest proportion of visible minorities aged 15 and older in 2006 (21%) after Toronto (41%), Vancouver (40%) and Abbotsford (21%). 16 CMAs with the lowest proportions of mixed couples, like Saguenay

(0.6%) and St. John's (0.9%), were also characterized by both low levels of immigration and a small visible minority population (Table 6).

Within CMAs, a higher proportion of couples in mixed unions were found in the central municipality than in the peripheral municipalities. 17 While 3.9% of all couples were in mixed unions in 2006, 5.5% of couples in the central municipality of CMAs were mixed compared to 4.7% in the surrounding municipalities. It could be that living in the central municipality offers amenities that are attractive to individuals who possess some of the other characteristics that are associated with being in a mixed union. For example, 2006 Census data showed a higher proportion of persons aged 20 to 34 and a higher proportion of same-sex couples were living in central municipalities. 18

Language of persons in mixed couples

Mixed unions are important to study not only because they represent another aspect of diversity in and of themselves, but also because of the implications for their participants in other areas. One example of the impact of mixed unions is that there may be some degree of linguistic transfer for persons in these types of couples. According to the 2006 Census, a higher proportion of allophones¹⁹ in mixed unions with a non-official mother tongue reported using an official language at home compared to those in non-mixed unions. Close to 8 in 10 allophones in mixed unions spoke English or French most often in the home in 2006, while this was the case for less than 4 in 10 allophones in non-mixed unions. In contrast, only 17% of allophones in mixed unions used a non-official language at home as did 57% of their counterparts in non-mixed unions (Chart 6).

Children in mixed union families

Although census data cannot determine if the children in the family were from the current relationship,

Table 6 Percentage of couples in mixed unions by census metropolitan area, 2006

	Couples in mixed unions		Couples in mixed unions
	percentage		percentage
Census metropolitan area		Census metropolitan area	
Vancouver	8.5	Halifax	3.3
Toronto	7.1	Kelowna	3.2
Calgary	6.1	Regina	2.6
Victoria	5.9	Saskatoon	2.6
Oshawa	5.4	St. Catharines-Niagara	2.6
Ottawa-Gatineau	5.4	Kingston	2.5
Edmonton	4.6	Brantford	2.2
Montréal	4.4	Thunder Bay	2.1
Winnipeg	4.2	Saint John	1.8
Guelph	4.2	Sherbrooke	· 1.7
Abbotsford	4.0	Québec	1.5
Canada	3.9	Peterborough	1.4
Hamilton	3.9	Greater Sudbury	1.3
Kitchener	3.9	Trois-Rivières	1.3
Barrie	3.8	Moncton	1.3
Windsor	3.7	St. John's	0.9
London	3.4	Saguenay	0.6

Source: Statistics Canada, Census of Population, 2006.

mixed couples had a higher proportion of having children at home, largely because individuals in mixed couples were generally younger than other couples. In 2006, 58% of the 289,400 mixed union couples had at least one child present in the home compared with 54% of all non-mixed unions. Furthermore, about 1 in 10 mixed union couples had at least one child under age 2 and none older than 5 years of age in the home compared to 5.6% of non-mixed couples.

A total of 293,600 children in 2006 lived in two-parent census families that had parents in mixed union relationships.²⁰ Among these children, two-thirds (66%) reported visible minority status while one-third did not belong to a visible minority group. Of the children who reported a visible minority status, the most common mixed union family (137,700 children) was when the child and one parent belonged to the same visible minority group and the other parent was not a visible minority.

Chart 6 Allophones in mixed unions reported using an official language at home more than allophones in non-mixed unions percentage of allophones 4.9 5.4 17.0 Languages spoken at home 8.2 70 Multiple languages 56.8 60 ☐ Non-official language ☐ French 50 English 40 2.2 693 30 20 255 10 Allophones in mixed union Allophones in non-mixed union 1. Multiple languages refers to individuals who reported English and/or French and non-official language(s).

Table 7 Children in two-parent families by visible minority status,

Children in twoparent families

	number	percentage
Visible minority status		
Total children	6,971,750	100.0
Child does not belong to visible minority group	5,567,900	79.9
Child and parents do not belong to visible minority group	5,459,400	78.3
Child and one parent do not belong to visible minority		
group, one parent in visible minority group	97,300	1.4
Child does not belong to visible minority group,		
parents in visible minority group	11,200	0.2
Child belongs to visible minority group	1,403,900	20.1
Child and parents in same visible minority group	1,171,500	16.8
Child in visible minority group different from at least		
one parent	232,400	3.3
Child and one parent in some visible minority group,		
one parent non-visible minority	137,700	2.0
Child and one parent in same visible minority group,		
one parent different visible minority	29,200	0.4
Child belongs to visible minority group, both parents		
non-visible minority	27,700	0.4
Child and parents each in different visible minority groups	18,100	0.3
Parents in same visible minority group, child in different		
visible minority	9,800	0.1
Child and one parent different visible minority, other		
parent non-visible minority	9,800	0.1
	,	

Note: These figures refer to children aged 0 to 24 present in the home of two-parent census families by visible minority status of children and visible minority status of parents.

Source: Statistics Canada, Census of Population, 2006.

An alternative look at mixed unions and urban areas

The proportion of spouses or partners in mixed unions is highest in the largest CMAs when the total population in couples is used as the denominator. However, if the denominator is based on the visible minority population in couples, then the results indicate that some CMAs with relatively small visible minority populations actually have fairly large proportions of individuals who are married or partnered outside their group. For example, the Quebec CMAs of Saguenay, Trois-Rivières and Québec, as well as Moncton and Saint John in New Brunswick, and Thunder Bay and Barrie in Ontario, all have relatively small visible minority populations. Due to the small size of these groups, this accounts for the high proportion (40% or greater) of the married or partnered visible minority population who formed unions outside their groups. When viewed from this perspective, the three CMAs with the lowest proportions of persons belonging to visible minority groups who were in couples that were mixed Vancouver (12.2%), Toronto (10.9%) and Abbotsford (9.8%).

There were also about 18,100 children in mixed union families where the child as well as each parent reported a different visible minority group, and an additional 9,800 children who belonged to a different visible group than one parent while the other parent did not have visible minority status (Table 7). Many of these children, 97% and 48%, respectively, reported a less common visible minority group or they simply reported as members of multiple visible minority groups.²¹

Mixed unions may create a culturally diverse environment within the family. Cultural practices within the family can impact the children.²² As the proportion of mixed unions increases in Canada, the implications may extend beyond the couples to the children's sense of identity.

Summary

According to census data, the number of couples in mixed unions has been on the rise in Canada since at least the early 1990s, at least partially due to the growth in the visible minority population. Based on the 2006 Census, Japanese were most likely to form a relationship outside their group, while this was least likely for South Asians. Within-group differences were also apparent as a higher proportion of Filipino, Korean, Southeast Asian, Japanese, Chinese and Latin American women in couples were in mixed unions compared to men from these groups, while married or partnered men who were Arab or West Asian, Black or South Asian represented a higher share of mixed unions than their female counterparts.

Compared to persons in couples who were not in mixed unions, persons in mixed unions were younger, did better socioeconomically and were more likely to live in large CMAs. For the visible minority population, there were more spouses or partners in mixed unions who were Canadian-born compared to those who were foreign-born, and the proportion increased with generation status.

There were proportionally more couples in common-law relationships in mixed unions than couples who were legally married, and a higher proportion of same-sex couples were in mixed unions than couples who were in opposite-sex couples.

More couples with at least one child present in the home were mixed compared to couples who did not have children, reflecting the fact that mixed union couples were generally younger and more likely to be at their life-cycle stage of having young children. In addition to the number of children whose parents were in mixed unions, the concept of mixed families, like those comprised of a child belonging to a visible minority but not the parents, further broadens the implications of ethno-cultural identity.

The impact of mixed unions could be far-reaching in changing the dynamic and nature of Canada's ethnocultural diversity in future generations. These consequences may impact the language transfer that takes place within mixed union households, as well as the experiences of children in mixed families and the way in which children of mixed unions report their ethnocultural origins and identify with visible minority groups.

GST

Anne Milan is a senior analyst with Demography Division,
Hélène Maheux is an analyst with Immigration and Ethnocultural Section and Tina Chui is Chief, Immigration and Ethnocultural Section in the Social and Aboriginal Statistics Division.

- See also Milan, A. and Hamm, B. (2004). Mixed unions. Canadian Social Trends. Statistics Canada Catalogue no. 11-008-XWE.
- For more information, see Chui, T., Tran, K. and Maheux, H. (2008). Canada's Ethnocultural Mosaic, 2006 Census. Statistics Canada Catalogue no. 97-562-X.
- 3. Milan and Hamm. (2004).
- 4. These figures include all ages.

- Batson, C. D., Qian, Z. and Lichter, D. T. (2006). Interracial and intraracial patterns of mate selection among America's diverse Black populations. Journal of Marriage and Family. 68: 658–672.
- First generation: Persons born outside Canada. For the most part, these are people who are now, or have ever been, landed immigrants in Canada. Also included in the first generation are a small number of people born outside Canada to parents who are Canadian citizens by birth. In addition, the first generation includes people who are non-permanent residents. Second generation: Persons born inside Canada with at least one parent born outside Canada. This includes: (a) persons born in Canada with both parents born outside Canada and (b) persons born in Canada with one parent born in Canada and one parent born outside Canada (these persons may also have grandparents born inside or outside Canada). Third generation or more: Persons born inside Canada with both parents born inside Canada (these persons may also have grandparents born inside or outside Canada). Definition from Chui, T., Tran, K. and Maheux, H. (2008). Canada's Ethnocultural Mosaic, 2006 Census. Statistics Canada Catalogue no. 97-562-X.
- Lee, S. M. and Boyd, M. (2008). Marrying out: Comparing the marital and social integration of Asians in the U.S. and Canada. Social Science Research. 37: 311-329.
- Kalmijn, M. and van Tubergen, F. (2006). Ethnic intermarriage in the Netherlands: Confirmations and refutations of accepted insights. European Journal of Population. 22: 371-397.
- Kalmijn, M. and van Tubergen, F. (2006). Ethnic intermarriage in the Netherlands: Confirmations and refutations of accepted insights. European Journal of Population. 22: 371-397. Aaron Gullickson. (2006). Education and Black-White interracial marriage. Demography. 43, 4: 673-689.
- Income data from the census relate to the calendar year prior to the census year. For the 2006 Census, the income data refer to 2005.
- 11. Batson, Qian and Lichter. (2006).
- 12. The first time information was collected on same-sex common-law couples was in the 2001 Census.
- 13. Of the 7.5 million married and commonlaw couples in 2006, 45,300 were samesex couples.

- 14. Bill C-38, the Civil Marriage Act, adopted on July 20, 2005, legalized same-sex marriage. Some provinces and territories had already legalized same-sex marriage, beginning with Ontario in June 2003.
- 15. Although the Ottawa-Gatineau CMA spans both the provinces of Quebec and Ontario, approximately three-quarters of the population is located on the Ontario side.
- 16. Labour Force Activity (8), Visible Minority Groups (14), Immigrant Status and Period of Immigration (9A), Age Groups (9) and Sex (3) for the Population 15 Years and Over of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 1996 to 2006 Censuses – 20% Sample Data. Statistics Canada Catalogue no. 97-562-X2006013.
- 17. It is important to distinguish between census metropolitan areas and municipalities (census subdivisions). A CMA usually consists of many municipalities, one of which, called the central municipality, is the census subdivision for which the CMA is named.
- 18. Martel, L. and Caron Malenfant, É. (2007). Portrait of the Canadian Population in 2006, by Age and Sex, 2006 Census. Statistics Canada Catalogue no. 97-551-X. Milan, A., Vézina, M. and Wells, C. (2007). Family Portrait: Continuity and Change in Canadian Families and Households in 2006, 2006 Census. Statistics Canada Catalogue no. 97-553-X.
- 19. An allophone is a person whose mother tongue is other than English or French.
- 20. Of the 7 million children under age 25 living with two parents, roughly 340,800 children, or 4.9%, lived in a mixed family situation where at least one family member, either the parent(s) or child, belonged to a visible minority group and at least one family member did not, or at least one family member belonged to a visible minority group that was different from the other family members.
- 21. Less common visible minority groups are reported in the category called visible minority n.i.e. (also known as 'not included elsewhere'). This category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander. Belonging to multiple visible minority groups means that respondents reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian.
- 22. For example, see Turcotte, M. (2006).

 Passing on the ancestral language.

 Canadian Social Trends. Statistics Canada
 Catalogue no. 11-008-XWE.

Looking for Aboriginal statistics online?

Aboriginal data

are offered in a series of online links that lead you to information about Aboriginal Peoples published by Statistics Canada.



Find the information you need now.

Let www.statcan.gc.ca guide you to Aboriginal data. On the Statistics Canada home Web page you'll find information on:

- → Aboriginal languages
- -- Childcare
- **→** Education
- Health and well-being
- → Housing
- ➡ Income
- Labour
- Aboriginal Children's Survey (ACS)
- Aboriginal Peoples Survey (APS)
- And much more....

Put the data to work.

Link to a host of online products, documents and data. Download data at a push of a button.

It's easy! Bookmark it!

Visit our Web site at www.statcan.gc.ca and click on any of the links located on the left hand side of the Web site home page and let your mouse lead the way!

First Nations,
Métis and Inuit data
at your fingertips!
www.statcan.gc.ca

Here are some of the handy links you'll find on the Statistics Canada Web site home page:

- † The Daily
- 2. By subject
 - Aboriginal Peoples
- 3. Census
 - · Release Topics
 - · Aboriginal Peoples
 - Data Products
 - Highlight tables (key indicators by topic and geography)
 - · Topic based tabulations
 - 2006 Community profiles
 - · Aboriginal population profile
 - Census tract profiles (neighbourhood statistics)
 - · Post-Censal data products
 - 2006 Profile of Aboriginal Children, Youth and Adults
- 4. Anaytical Studies (Aboriginal Survey results)
- 5. Definitions, Data Sources and Methods
 - Questionnaires
 - · List by subject
 - Alphabetical list
 Aboriginal Children's Survey (ACS),
 Aboriginal Peoples Survey (APS)
 and Census



General enquiries:

E-mail: sasd-dssea@statcan.gc.ca Toll-free number: 1-800-263-1136

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of *Canadian Social Trends* explores the social realities that we are dealing with **now**.

... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



Take advantage of this opportunity today!

Subscribe now by using any one of the following methods: Call toll-free 1-800-267-6677 Fax toll-free 1-877-287-4369 E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the free online version of Canadian Social Trends.

SANADIA SECIALISTA

Features

Foreign nationals working in Canada A profile of fathers

Migration from central municipalities
Canadian emigration to the United
States

Marital trends and education Helping individuals with a disability

Aboriginal children:

Child care

Family, community and language Participation in sports and cultural activities

\$24 Canada • Catalogue no.11-008 Winter 2010 • No. 90





Statistics Canada Statistique Canada Canadä



HOW HO TEAL NUS

Editorial Office

E-mail: cstsc@statcan.gc.ca

Fax: 613-951-0387 Write: Editor-in-Chief,

> Canadian Social Trends Statistics Canada

7th floor, Jean Talon Building 150 Tunney's Pasture Driveway

Ottawa, Ontario K1A 0T6

For service to subscribers

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Write: Statistics Canada, Finance, 6-H R.H. Coats Building

150 Tunney's Pasture Driveway

Ottawa, Ontario

K1A 0T6

How to order Statistics Canada publications

E-mail: infostats@statcan.gc.ca

Phone: 1-800-267-6677 Fax: 1-877-287-4369

Online: http://www.statcan.gc.ca/bsolc/english/bsolc?catno=11-008-XPE

Need more information about Statistics Canada products?

E-mail: infostats@statcan.gc.ca

Phone: 1-800-263-1136
Online: www.statcan.gc.ca
TTY Line: 1-800-363-7629

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "The agency" > "Providing services to Canadians."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

CST

Editor-in-Chief Cara Williams

Senior English Editors Nikki Burke, Valerie Peters

Senior French Editor Marie-Paule Robert

Production Manager and Art Direction

Monique Poirier

Creative Services

Dissemination Division, Statistics Canada

Publishing Specialists

Dissemination Division and Publication Production Section, Special Surveys Division

Marketing

Jeff Jodoin, Alex Solis

Review Committee

Jane Badets, Josée Bégin, Rosemary Bender, Yvan Clermont, Nancy Darcovich, Louise Marmen, Karen Mihorean, Jillian Oderkirk, Georgia Roberts, Grant Schellenbera

Canadian Social Trends

December 2010

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2010

All rights reserved. This product cannot be reproduced and/or transmitted to any person or organization outside of the licensee's organization. Reasonable rights of use of the content of this product are granted solely for personal, corporate or public policy research, or for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from this product. These materials are solely for non-commercial purposes. In such cases, the source of the data must be acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, users shall seek prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Indexed in the Academic ASAP, Academic Search Elite, Canadian Periodical Index, Canadian Serials, Expanded Academic ASAP, PAIS International, Periodical Abstracts, Periodical Abstracts Research II, ProQuest 5000, Proquest Research Library and available on-line in the Canadian Business and Current Affairs Database.

ISSN 0831-5698

ISSN 1481-1634 (Electronic)

Cette publication est également disponible en français.

SANADIAN SOCIAL TIENAS

Features

3 Migration from central to surrounding municipalities in Toronto, Montréal and Vancouver

by Martin Turcotte and Mireille Vézina

26 Making fathers "count" by Pascale Beaupré, Michael Wendt and Heather Dryburgh

35 Foreign nationals working temporarily in Canada

by Derrick Thomas

51 Participation in sports and cultural activities among Aboriginal children and youth

by Kristina Smith, Leanne Findlay and Susan Crompton

59 Emigration from Canada to the United States from 2000 to 2006

by Patrice Dion and Mireille Vézina

70 Sharing their lives: women, marital trends and education

by Laetitia Martin and Feng Hou

- 75 Family, community, and Aboriginal language among young First Nations children living off reserve in Canada by Evelyne Bougie
- 85 Child care for First Nations children living off reserve, Métis children, and Inuit children

by Leanne C. Findlay and Dafna E. Kohen

95 Living with disability series
Help with activities of daily living for
people with a disability

by Patric Fournier-Savard, Chantal Mongeon and Susan Crompton

Cover

Photography used by permission; © 2010 Carol Noël all rights reserved.

Standard symbols for Statistics Canada

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- E use with caution
- F too unreliable to be published

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48 - 1984.

Migration from central to surrounding municipalities in Toronto, Montréal and Vancouver

by Martin Turcotte and Mireille Vézina

Introduction

After the Second World War, and over the next several decades. the demographic growth of North American residential suburbs occurred as a result of the relocation of individuals and families from city centres or other areas. In society today, many of those who were born in the suburbs may never leave their original area, or may relocate, but continue to reside in a suburb to raise their families. 1 At the same time there continues to be a migration of many young adults and families from central municipalities to surrounding municipalities, while few move in the opposite direction. These intrametropolitan migratory movements are one of the reasons for the discrepancy between the the cities and suburbs with respect to family representation. In fact, the 2006 Census data show, that households consisting of a couple with children continued to be more strongly represented in outlying areas than in city centres in practically all of the country's urban areas.² This discrepancy in family composition is particularly noticeable between central and surrounding municipalities in the Toronto, Montréal and Vancouver

metropolitan areas (for a definition of the concepts of central and surrounding municipalities, see "What you should know about this study").

Various large metropolitan municipalities vie for residents by advertising the attractions and services their environments offer. Additionally, many central municipalities try to reverse the current migratory trend and encourage young adults and their families, particularly those with children, to settle there. For example, the city of Montréal has put a community family action plan in place to attract young families to locate there.3 The cities of Toronto and Vancouver have developed programs focused on child care services to attract new migrants.4

Currently, there is little detailed information available about the social and economic characteristics of young adults who move from central municipalities to surrounding municipalities. To fill this gap, this article looks at the intrametropolitan migration of persons aged 25 to 44 (in 2006) in the country's three largest metropolitan areas—Toronto, Montréal and Vancouver. This group is of particular interest because they are significantly more likely to move

from downtown to a surrounding municipality, and they are at an age where they are establishing families and buying first homes. As a result, they are a particularly sought-after 'clientele' for all municipalities, both central and outlying.

This article uses the 2006 Census of Population data (for more details on the data and concepts, see "What you should know about this study"). Geographic maps are included to clarify the distinction between central municipality and surrounding municipality for each of the three metropolitan areas studied.6

For every person who moved from a municipality outside Toronto to Toronto, 3.5 made the opposite move

Numerous demographic studies have shown that age is one of the factors most strongly associated with the probability of migrating. In fact, migration is most frequent in early adulthood, when people are experiencing transitions such as pursuing postsecondary studies, entering the labour market and family formation.⁷ The tendency to migrate decreases considerably once these stages have been completed.

What you should know about this study

The data used come from the full 2006 Census questionnaire (completed by 20% of Canadians). People living in collective dwellings (hotels, hospitals, military bases, etc.) in 2006 are excluded from the study.

Definitions

Census metropolitan area

A census metropolitan area (CMA) is formed by one or more adjacent municipalities located around a large urban area (known as the urban core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the urban core.

Central municipality and surrounding municipalities

The central municipality or downtown gives its name to a census metropolitan area. It is generally the historic city, around which the suburbs have developed (with some more remote villages joined by urbanization). In this study, the territory included in central municipalities is bound by the administrative or political boundaries of the cities of Toronto, Montréal or Vancouver. The term 'surrounding municipality' is used to refer to all other municipalities in the metropolitan area (in other sources, these are sometimes called suburban or peripheral municipalities).

Migration and population studied

Migrants are identified by comparing their current place of residence to the one they had five years earlier (as reported in the 2006 Census). Since this study concerns intrametropolitan migration, only persons who resided in the same metropolitan area in 2001 and 2006 were included.

The main group of interest consists of persons who resided in the central municipality of their metropolitan area (i.e. the cities of Toronto, Montréal or Vancouver) in 2001. These persons are considered migrants if they resided in any municipality adjacent to the metropolitan area in 2006. They are considered non-migrants if they still resided in the central municipality (a change of address within the central municipality is not considered migration).

Likewise, persons who resided in any municipality adjacent to the central municipality of the three metropolitan areas were studied.

In addition to manicipality of esidence five years earlier, the census includes information on place of residence one

year earlier. The analyses performed in preparing this article were replicated using mobility over a one-year period rather than five. This results in smaller proportions of persons moving from the central municipality to a surrounding municipality (since using this methodology, residents 'risk' moving in a single year rather than five). However, the conclusions are the same whether a one- or five-year reference period is used. Thus, the subgroups with the greatest probability of migrating from the central municipality were essentially the same in all 3 CMAs. The advantage of using a five-year period is that analysis can be based on larger samples, thus allowing for more details on the various characteristics of persons who do or do not migrate (Tables A.1, A.2 and A.3), and the destinations chosen by migrants (Table A.6).

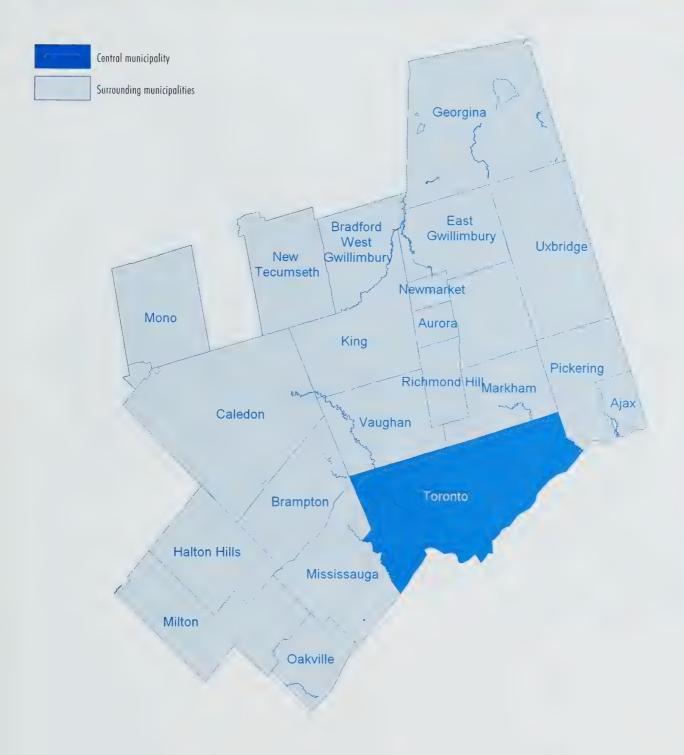
That being said, whether a one-or five-year reference period is used, care must be taken in interpreting certain results. The characteristics of persons were measured in 2006 while the decision to move (or not) was made before the census date. Thus, some personal characteristics might have changed. For example, their income might have been higher or lower when they left the central municipality than when income was measured in 2006.

Exchange ratio

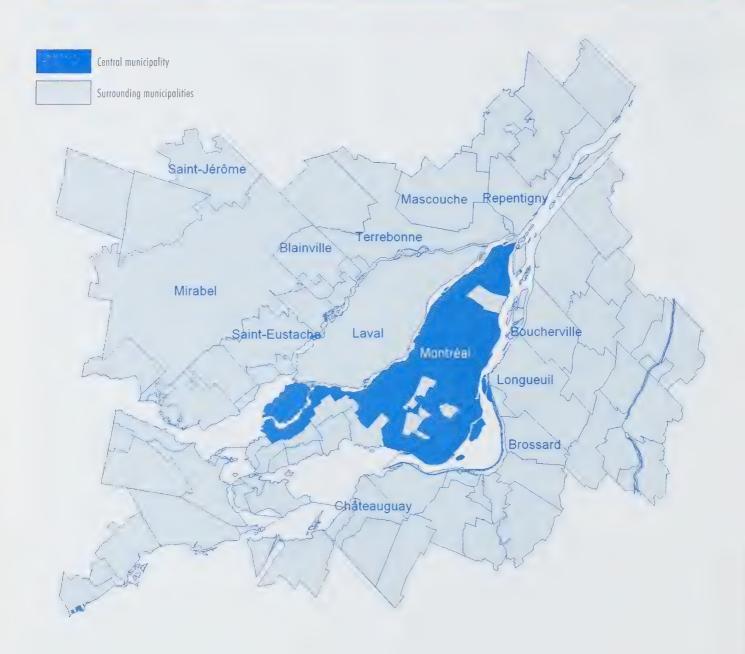
The exchange ratio (Tables A.1, A.2 and A.3) is the number of persons who moved from a central municipality to a surrounding municipality divided by the number of persons who moved in the opposite direction. For example, if, for a given group of persons, 5,000 moved from the central municipality to a surrounding municipality and 2,500 others moved in the opposite direction, the exchange ratio would be 2 (5,000/2,500). In this case, the exchange ratio may be interpreted as follows: for each person who moved from a surrounding municipality to a central municipality, two persons moved in the opposite direction.

Exchange ratios may be affected by the population size of the two regions being compared (in this case, the central municipality of three metropolitan areas and the surrounding municipalities). For that reason, they must be interpreted with care. In particular, it is not recommended that the exchange ratios of the three metropolitan areas be compared to each other.

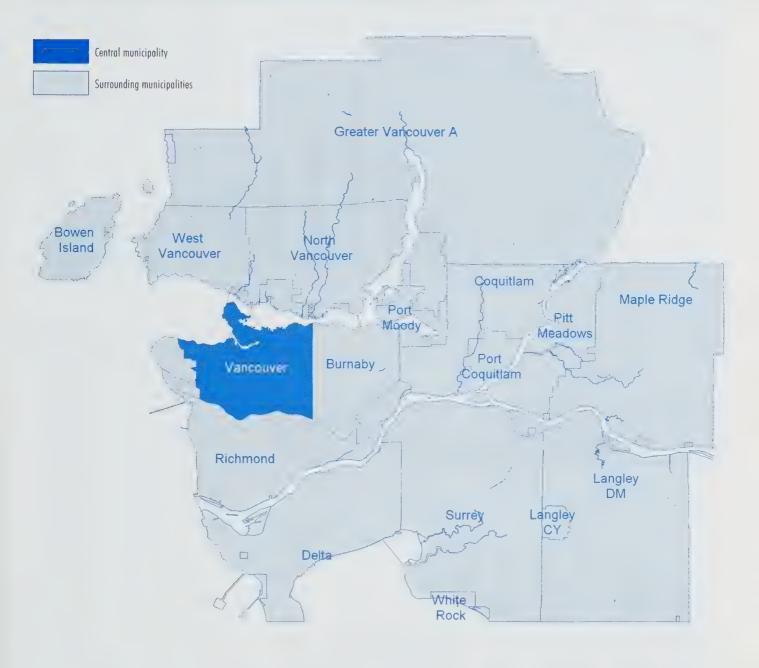
Map 1 Municipality of Toronto and outlying municipalities



Map 2 Municipality of Montréal and outlying municipalities



Map 3 Municipality of Vancouver and outlying municipalities



It is not surprising that age was observed to be strongly linked to the possibility of moving from the municipalities of Toronto, Montréal or Vancouver to a surrounding municipality. Examination of the adult population aged 20 and over showed that the propensity to move to a surrounding municipality increases up to age 34 and then decreases in the older age groups (Chart 1).

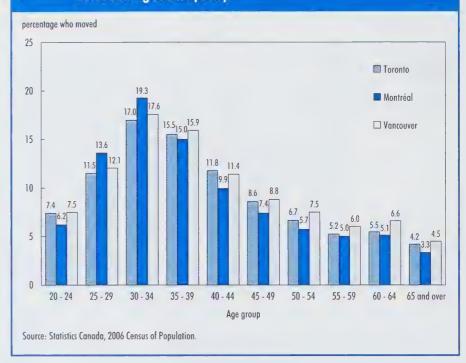
In all three regions, the population aged 25 to 44 was more likely than any other age group to move from a central municipality to a surrounding municipality. According to a recent survey, single homes located in low-density residential neighbourhoods continued to be the type of housing most sought after by persons aged 25 to 44.8 The supply of this type of housing is greater in surrounding municipalities than downtown (see, for example, Table A.4).

The three CMAs studied differ significantly from each other with respect to their geography, size of population aged 25 to 44 and distribution of that population between the central municipality and surrounding municipalities. In 2006, 1.6 million persons aged 25 to 44 were enumerated in the Toronto metropolitan area (51% resided in the central municipality), 1.1 million in the Montréal metropolitan area (48% resided in the central municipality) and 630,000 in the Vancouver metropolitan area (32% resided in the central municipality)

Despite these differences, the proportion of 25- to 44-year-olds who moved from the central municipality to a surrounding municipality was the same in all three regions (i.e., 14%) (Tables A.1, A.2 and A.3). The proportion of persons in this age group who moved in the opposite direction—that is, from a surrounding municipality to the central municipality—was about three times lower: 5% in Toronto and Montréal, and 4% in Vancouver.

A comparison of moves in the two directions found that the three central municipalities suffered a

Chart 1 People aged 30 to 34 are the most likely to have moved from one of the three central municipalities to a surrounding municipality



net loss of 25- to 44-year-olds to surrounding municipalities. For example, in the Toronto region, for each person who left any of the surrounding municipalities to settle in the central municipality, 3.5 persons made the opposite move (see exchange ratio, Table A.1).

New parents are among those most likely to leave the central municipality

Previous research has shown that family structure is a crucial factor in the decision to migrate. Among the various factors considered in this study, family status was among those that most strongly affected the probability of leaving a central municipality (Tables A.1, A.2 and A.3). The finding held even when the effects of age, income and other factors were taken into consideration.

In all three CMAs, individuals who became parents for the first time between 2001 and 2006 were among those most likely to have left

a central municipality. For example, over this period in the Vancouver region, between 27% and 29% of new parents left the city of Vancouver to settle in a surrounding municipality. In comparison, only 8% of persons living alone relocated to surrounding municipalities—about three times less. In the Montréal region, the difference was more pronounced: 34% of persons who became parents of two or more children between 2001 and 2006 left the central municipality compared to 7% of persons living alone (Table A.2).

Several reasons might help explain why parents of young children were more likely to leave the central municipalities. For example, according to previous studies, it is often the desire for more space to accommodate a new family situation that persuades new parents to move to areas where larger houses are more readily available and cost less. 10 In addition to a need for space, many new parents choose a

residential neighbourhood farther from downtown because they want to live close to other families (who have needs similar to theirs)¹¹ and because they perceive these areas as being safer, better suited to raising children and, in some cases, less noisy.¹²

Lone parents are more inclined to remain in the central municipality

When children get older and the family is complete, the probability of moving, whether a short or long distance, decreases considerably. The results show that persons who were already parents in 2001, but did not have other children during that period, were less likely than new parents to move from a central municipality to a surrounding municipality (Tables A.1, A.2 and A.3).

One type of family stands out from the others: single-parent families. These families were less likely than average to move from a central municipality to a surrounding municipality. This lower propensity to migrate was not explained by lower incomes. In fact, even at similar income levels (taking other factors like education into account), single-parent families continued to be less likely to have left a central municipality (Tables A.1, A.2 and A.3).13 According to a study conducted in the Toronto, Montréal and Vancouver regions, lone parents were more interested in living in denser neighbourhoods than twoparent families. 14 One possible explanation for this may be that single-parent families may have less time available for commuting or maintaining a house or garden.

According to one classic economic theory, persons and households vote with their feet—i.e., they choose to live in a municipality that offers them the type of environment they want with the best price-quality ratio (the desired service levels and types at a cost deemed satisfactory, in municipal taxes). ¹⁵ Different family situations can create different needs, thus leading to some of the

differences between family types in the propensity to leave central municipalities.

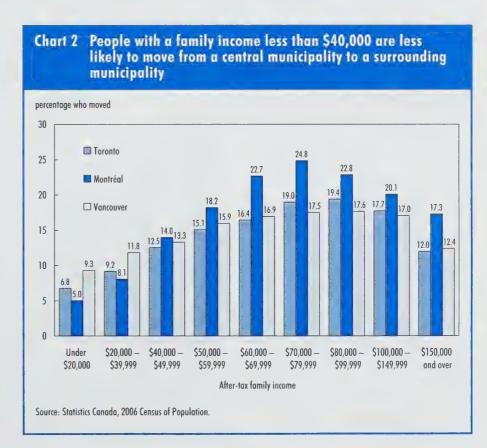
Lowest-income and highestincome persons were less likely to have migrated to a surrounding municipality

Apart from age and family status, family income is a key factor affecting the decision to move: higher incomes allow households and families to choose the type of housing they prefer and where they want to live. 16 Conversely, having too low an income makes it difficult to buy a vehicle, which is often essential to living in low-density suburbs. 17 Whether in Toronto, Montréal or Vancouver, persons with the lowest incomes (less than \$20,000 after taxes)¹⁸ were the least likely of all to have moved from the central municipality to a surrounding municipality (Chart 2). In Vancouver, for example, only 9% of persons in the lowest income category migrated from the downtown area. In comparison, the proportion

was twice as high, 18%, for those with after-tax incomes between \$80,000 and \$99,999 (Table A.3).

In each of the three CMAs, the highest proportion of moves to surrounding municipalities occurred in families having after-tax incomes between \$70,000 and \$99,999. In Montréal, for example, persons in this income bracket were about five times more likely to have moved to a surrounding municipality than those who had after-tax incomes of \$20,000 or less.

Despite the positive correlation between income and the probability of leaving the central municipality, this trend reversed at the top of the income scale. That is, those with the highest incomes were *less* likely to move to a surrounding municipality. For example, in Toronto and Vancouver, those with the highest after-tax incomes were less likely to have migrated to a surrounding municipality than were, on average, all 25- to 44-year olds residing in the central municipality in 2001.



This reversal at the top end of the income scale may be because these individuals and families are more likely to be able to afford housing in more central areas where properties of equivalent size generally cost more. 19 For most households, a compromise must be made between distance from downtown and desired residence size. For wealthier families, this compromise can be avoided since they can more easily purchase relatively spacious housing close to downtown. Additionally, persons with incomes at the top of the scale may place a higher premium on the possibility of access to certain 'luxury' services and consumer goods (restaurants, clothing, etc.) that are often found in densely populated central areas.20

If the analysis is restricted to only new parents (i.e., those who had a first child or more between 2001 and 2006), the impacts that 'family status' and 'income' have on the probability of leaving a central municipality are evident. For example, in Montréal,

among new parents who had their first two (or more) children between 2001 and 2006 and who had an after-tax income between \$50,000 and \$99,999 more than 40% moved from the municipality of Montréal to a surrounding municipality (Chart 3).

Those who had completed college or had a bachelor's degree more likely to leave a central municipality

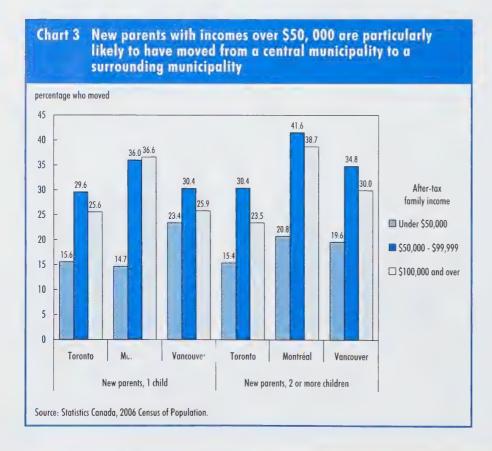
In each of the three metropolitan areas, persons who completed their college or bachelor's studies (Tables A.1, A.2 and A.3) were more likely to leave the central municipality. The finding was the same when the effect of other factors—income, age and family status—was taken into account. The many benefits of postsecondary education are well known—higher income, greater job security, better working conditions and, in general, better health.²¹ The migration of those with diplomas or undergraduate degrees to surrounding municipalities is likely a result of them having more stable incomes, since much of the housing available in suburban municipalities requires a stable income.²²

On the other hand, whether in Toronto, Montréal or Vancouver, the most educated were slightly less likely to leave the central municipality. For example, in Montréal, when other factors were kept constant in the logistic regression, the odds of moving to a surrounding municipality were 49% lower for persons with a master's degree or doctorate than for those with a college diploma. This might be because those with the highest levels of education may place a premium on the amenities typically found in city centres such as museums, concert halls, and a wide variety of restaurants, and are more willing to pay more or live in lower-quality housing in order to be close to them.²³

Artists and the university professors more likely to remain in central municipalities

According to some urban affairs experts, large cities and metropolitan areas should do everything they can to train, attract and retain members of a certain "creative class". i.e., scientists, engineers, artists and knowledge industry workers, because their presence would improve quality of life and possibly increase the variety and number of well-paid jobs.24 Influenced by this idea, many large cities have developed marketing strategies aimed at attracting these workers by highlighting the cultural vitality and cosmopolitan nature of their cities. 25

As shown in Table A.5, artists who were living in a central municipality were likely to remain there. Whether in Toronto, Montréal or Vancouver, creative and performing (musicians, dancers, actors) arts professionals were among those least inclined to migrate to a surrounding municipality (6%). Interestingly, arts, culture, sports and recreation managers were also less likely to leave the central municipality (7% in Montréal, for



example), which was not the case for senior managers in other industries (19% in the Montréal metropolitan area). It should be noted that in all three metropolitan areas, significantly more artists aged 25 to 44 resided in the central municipality than in a surrounding municipality. For example, in 2006, in the Toronto CMA, 76% of creative and performing arts professionals resided in the central municipality (results not shown).

University professors also stood out from other professions. In fact, in all three CMAs, less than 7% moved between 2001 and 2006. In comparison, their colleagues at the college, secondary and elementary levels were almost three times more likely to move to the suburbs, possibly partly because of the location of the institutions where they worked (since many colleges and secondary schools are found in surrounding municipalities, while many universities are in the central municipality).

In the Montréal CMA, francophones are more likely to leave the city of Montréal than anglophones and allophones

Francophones—i.e., persons whose mother tongue is French—represented about two-thirds of the total population of Montréal's metropolitan area (65.7%) in 2006.²⁶ However, their relative weight was not the same everywhere. While they were a slight minority on Montréal Island, they were clearly in the majority on the northern and southern tips.

This situation is partly explained by the fact that francophone Montrealers aged 25 to 44 have a greater tendency than anglophones and allophones to leave the city of Montréal (17% for francophones compared to 11% for anglophones and allophones, Table A.2). Moreover, when they left the city of Montréal, francophones were more likely to move to municipalities off Montréal Island, such as Longueuil, Terrebonne or Repentigny. Thus, while only 3% of

persons whose mother tongue was French who left the city of Montréal chose a municipality on Montréal Island, 26% of anglophones and 11% of allophones did so (data not shown).

When mother tongue is taken into account along with family status and income, the differences among the groups are more pronounced. Almost one-half of all new francophone parents with incomes between \$50,000 and \$99,999 left the city of Montréal for a surrounding municipality between 2001 and 2006 (45%). The corresponding proportions were 26% for allophones and 30% for anglophones.

In the Montréal and Vancouver CMAs, persons born in Canada are more likely to leave the central municipality

In general, the reasons why members of certain immigrant communities are attracted to suburban residential areas are very similar to those of non-immigrants: the possibility of becoming a home owner, lower housing prices and areas perceived to be safer for children.²⁷ Access to ownership is also considered by many as a mark of social integration and economic success in the host society.²⁸

Historically, non-immigrants were more closely associated with the exodus to the suburbs. That view still quite accurately describes the situation in Montréal, where non-immigrants were more likely to leave than immigrants, regardless of their place of birth. For example, in that CMA, 18% of non-immigrants aged 25 to 44 left the central municipality compared to only 6% of immigrants from South Asia.

On the other hand, in Toronto, immigrants, particularly those from South Asia (22%) and the Middle East (18%), had the greatest propensity to move from the city of Toronto to a surrounding municipality (only 11% of Torontonians born in Canada had become 'ex-Torontonians' in 2006).

Finally, in Vancouver, the propensity of non-immigrants to move approached that of immigrants born in certain specific regions (South America, Middle-East, South Asia), but exceeded that of immigrants of other origins.

In the Toronto and Vancouver regions, several municipalities outside the central municipality have large immigrant populations (both in number and proportion).²⁹ This has an effect on the propensity to move from the central municipality, since immigrants are more likely to choose municipalities where immigrant groups already constitute a large part the population.

Data on the municipalities chosen by persons who relocated from a central municipality gives a better understanding of this situation (Table A.6). For example, in the Toronto CMA, 21% of immigrants who moved from the municipality of Toronto to a surrounding municipality chose the municipality of Brampton (compared to only 9% of non-immigrants). Similarly, the municipality of Markham was chosen by 19% of immigrants who moved from the city of Toronto, compared to 7% non-immigrants who relocated from the city of Toronto.

In Vancouver, proportionally more immigrants chose the municipalities of Richmond and Burnaby, two the municipalities with the highest immigrant populations in Canada.

Finally, in the Montréal region, the municipality of Laval was significantly more popular with immigrants who moved from the city of Montréal (41% chose Laval) than among nonimmigrants also who decided to leave the central municipality (16% chose Laval).

While new immigrants (those who arrived in Canada between 2001 and 2006) were not included in this study, it should be noted that about 7 out of 10 new immigrants choose to settle in the Toronto, Montréal and Vancouver CMAs. Additionally, a majority of new immigrants settle in the central municipality of these

three CMAs, despite the growing popularity of the surrounding municipalities.³⁰ Moreover, these newcomers contribute greatly to maintaining demographic growth in these central municipalities.

Childless couples are more likely to migrate to a central municipality

Up to this point, emphasis has been placed on the characteristics of persons who were more likely to move from a central municipality to a surrounding municipality. But it is equally interesting to examine those individuals who move in the opposite direction—that is from the surrounding areas to the central municipality.

In each of the three municipalities examined here, between 4% and 5% of persons living in a surrounding municipality in 2001 relocated to a central municipality in 2006 (Tables A.1, A.2 and A.3). Generally

speaking, the people least inclined to move from their municipality to a central municipality were those aged 40 to 44, those who were already parents in 2001 (and thus had children aged 5 or over in 2006) and those who also worked in a noncentral municipality.

New parents living in a surrounding municipality in 2001 were also less inclined than average to migrate to the central municipality. For that reason, in central municipalities,

Profile of the population of central municipalities and surrounding municipalities in the Montreal, Toronto and Vancouver metropolitan areas

Previous research has repeatedly shown that the populations of North American suburbs have never been as homogeneous as is commonly believed. This homogeneity has decreased even more so in recent decades because these populations are rapidly diversifying in terms of demographic, economic and cultural points of view. The stereotypical image of suburbanites—i.e, young, non-immigrant, middle or upper class families consisting of married couples with two kids — corresponds less and less to reality. Despite this diversification, differences remain in the demographic and socioeconomic profile of the populations of central municipalities and their surrounding municipalities.

First, in the three metropolitan areas, the population aged 0 to 19 is slightly underrepresented in the central municipality compared to surrounding municipalities. For example, in 2006, 22% of residents of the municipality of Toronto were under 20 years of age compared to 28% in the surrounding municipalities (data not shown).

Among the 25- to 44-year old group, fewer parents were observed in central municipalities than in surrounding municipalities. For example, in Toronto, 38% of persons aged 25 to 44 lived as couples with children. The corresponding proportion was 57% in the surrounding municipalities (Table A.4). Conversely, a larger percentage of those living alone or with roommates were found in the central municipalities with roommates. For example, in 2006, 29% of persons aged 25 to 44 residing in the city of Montréal lived alone or roomed with others compared to 13% in surrounding municipalities.

In all three metropolitan areas, persons born in Canada to parents also born in Canada (non-immigrants) were less represented in central municipalities than in surrounding municipalities. The gap was particularly large in the Montréal area where non-immigrants represented less than one-half of the central municipality's population (45%). In comparison, non-immigrants represented 74% of the population in Montréal's surrounding municipalities. The corresponding proportions in the Vancouver CMA were 29% in the central municipality and 34% in the surrounding municipalities.

Central municipality residents were more likely to have finished university (but slightly less likely to have finished college and just as likely to have finished high school) (Table A.4). Paradoxically, residents of central municipalities were more likely to have low income after-tax than those in surrounding municipalities.

In terms of housing, central municipality residents were much more likely to rent, more inclined to live in an apartment building and more likely to live in apartments with two or fewer rooms. Finally, those living in the central municipality were more likely to also work in the central municipality and were much more likely to use public transit or walk to work (Table A.4).

- For example, Jackson, K. T. (1985). Crabgrass Frontier: The Suburbanization of the United States. New York: Oxford University Press.
- 2. Smith, P. J. (2007). "Suburbs." Canadian Cities in Transition. Third Edition. Don Mills: Oxford University Press. Katz, B. et Lang, R. E. (2003). Redefining urban and suburban America: evidence from the Census 2000. Washington: Brookings Institution Press.

Jackson, K. T. (1985). Crabgrass Frontier: The Suburbanization of the United States. New York: Oxford University Press.

the departure of new parents far outweighed the arrival of parents from surrounding municipalities. The exchange ratios (last columns in Tables A.1, A.2 and A.3) illustrate this. In the Montréal area, for example, for every new parent of two or more children who left a surrounding municipality for downtown, 17 moved to the suburbs.

Non-family persons (mostly those living alone), younger people and childless couples were more likely to move from a surrounding municipality to a central municipality. After leaving their parents' home, but before becoming parents themselves, many people choose to live near downtown to finish their education or start a first job. For them, the city might represent a place of transition.31 Single people might prefer downtown life for all kinds of reasons, one of which is that this environment allows them to meet other people more easily.32 Also, people living alone might more easily find housing that suits their financial situation and lifestyle in a central municipality since more rental housing is available in the core than in most neighbouring municipalities (Table A.4).

In the three CMAs, those in the lowest income bracket, (under \$20,000) were more likely than others to move from a surrounding municipality to a central municipality. In Montréal and Vancouver, the number of persons with incomes under \$20,000 who migrated from a surrounding municipality to a central municipality was slightly higher than the number of those moving in the opposite direction (exchange ratio less than 1).

More generally, there are many other reasons why residents of surrounding municipalities move to a central municipality such as shorter commuting distances or a desire to change lifestyles. In fact, many people like urban living and its cultural offerings, as well as the street culture found in certain neighbourhoods with their public spaces, cafes and greatly diversified populations.33 These factors help attract new residents and also may encourage people already living in the central areas to remain.

Summary

The migration of individuals and families from central municipalities to the suburbs is an important issue for urban planers. From the central municipalities' point of view, it is important to clearly understand the characteristics of people moving to surrounding municipalities in order to better target action aimed at countering such movements. From the surrounding municipalities' point of view, it is useful to understand the characteristics of the residents in order to better plan for the appropriate infrastructure and services that may be required.

In Toronto, Montréal and Vancouver, this study has shown that among people living in a central municipality in 2001, those aged 25 to 44 were particularly likely to move to a surrounding municipality. In all three metropolitan areas, almost 1 person in 6 in this age group left downtown and moved to a surrounding municipality. There was a significantly lower likelihood of moving from a surrounding municipality to a central municipality, with no more than 5% of people doing so in the three metropolitan areas studied.

The propensity to move to a surrounding municipality varied considerably depending on individual's social and economic characteristics. Those most likely to move were new parents, people with a college diploma or bachelor's degree, and those with after-tax incomes between \$70,000 and \$99,999. In Montréal, non-immigrants were more likely than immigrants to leave the central municipality, while the opposite was true in Toronto. In Montréal, more francophones than anglophones or allophones left the central municipality for the one of the surrounding municipalities.

Those who relocated to the centre were more likely to be younger, live alone or with room-mates and have low incomes.



Mireille Vézina and Martin **Turcotte** are analysts in Statistics Canada's Social and Aboriginal Statistics Division.

Table A.1 Factors associated with the probability of moving from the municipality of Toronto to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44

	Moved from the municipality of Toronto to a surrounding municipality		Moved from a surrounding municipality to the municipality of Toronto		Net intrametropolitan migration between the central municipality and other municipalities	
	percentage	adjusted odds ratio	percentage	adjusted odds ratio	exchange ratio	
Characteristics						
Total	14		5		3.5	
Sex						
Women †	14	1.00	4	1.00	3.7	
Men	14	0.89*	5	1.18*	3.3	
Age group						
25 to 29 †	11	1.00	8	1.00	1.6	
30 to 34	17	1.07*	6	0.67*	3.7	
35 to 39	16	0.87*	4	0.49*	5.0	
40 to 44	12	0.64*	2	0.33*	5.3	
Family status	12	0.01	L	0.00	J.U	
Childless persons						
Adult child living with parents	7	0.67*	2	0.10*	4.2	
	/	0.07	۷	0.10	4.2	
Non-family (person living alone or with roommates) †	6	1.00	17	1.00	0.8	
Persons in a couple	16	1.97*	10			
	10	1.97	10	0.75*	2.5	
Persons with children	1.0					
Lone parents	10	1.57*	5	0.36*	2.9	
Married or common-law parents						
Were parents in 2001, no other children						
since	17	2.30*	1	0.16*	9.5	
Were parents in 2001, at least one new						
child since	21	2.72*	2	0.15*	10.5	
Had their first child between 2001 and 2006	25	3.18*	4	0.29*	7.0	
Had their first children between 2001 and						
2006 (2 or more children)	24	3.29*	3	0.19*	8.5	
Highest level of education attained						
No high school diploma	11	0.68*	4	1.03	4.0	
High school diploma	13	0.82*	4	0.95	3.7	
College or vocational school diploma †	15	1.00	4	1.00	3.8	
University degree, bachelor's	15	0.90*	7	1.73*	3.0	
University degree, master's or doctorate						
(including medical studies)	14	0.77*	7	2.32*	3.7	
After-tax family income						
Under \$20,000	7	0.45*	11	2.57*	1.4	
\$20,000 to \$39,999	9	0.49*	9	2.48*	1.9	
\$40,000 to \$49,999	13	0.64*	7	2.15*	2.5	
\$50,000 to \$59,999	15	0.75*	5	1.70*	3.4	
560,000 to \$69,999	16	0.84*	4	1.21*	4.6	
\$79,990 to \$79,999 †	19	1.00	3	1.00	5.9	
\$80,000 to \$99,999	19	1.04				
· · ·			3	0.91	5.4	
\$100,000 to \$149,999	18 12	1.03 0.68*	2	0.71* 0.79*	6.2	
5150,000 and over		11 / 0 *)	0.70*	4.3	

Table A.1 Factors associated with the probability of moving from the municipality of Toronto to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44 (continued)

	Moved from the municipality of Toronto to a surrounding municipality		Moved from a surrounding municipality to the municipality of Toronto		Net intrametropolitan migration between the central municipality and other municipalities	
	percentage	adjusted odds ratio	percentage	adjusted odds ratio	exchange ratio	
Low-income status after-tax						
No	15	***	4	***	3.7	
Yes	8	***	8	•••	2.2	
Place of birth						
Canada ¹ †	11	1.00	4	1.00	2.3	
Canada, with at least one immigrant parent	12	1.10*	5	1.12*	2.3	
South America	14	1.33*	5	1.27*	4.4	
Europe	16	1.40*	4	0.96	5.1	
Africa	11	1.10	5	1.06	4.3	
Middle East	18	1.93*	5	1.17	4.8	
East Asia	16	1.37*	5	0.95	6.0	
Southeast Asia	13	1.04	6	1.55*	4.0	
South Asia	22	1.74*	3	0.92	7.1	
United States, Oceania and others	9	0.76*	5	1.25	2.4	
Place of work						
City of Toronto †	9	1.00	11	1.00	2.3	
Other municipalities in the CMA	34	5.09*	2	0.17*	6.1	
Outside the CMA	20	2.90*	3	0.25*	4.1	
No fixed place of work	13	1.83*	4	0.29*	4.0	
No place of work	10	1.30*	4	0.39*	4.0	

[†] reference group

Source: Statistics Canada, 2006 Census of Population.

 $^{^*}$ difference statistically significant compared to the reference group at p < 0.05

^{1.} Includes persons born outside Canada but who are nevertheless Canadian by birth.

Table A.2 Characteristics associated with the probability of moving from the municipality of Montréal to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44

	Moved from the municipality of Montréal to a surrounding municipality		Moved from a surrounding municipality to the municipality of Montréal		Net intrametropolitan migration between the central municipality and other municipalities	
	percentage	adjusted odds ratio	percentage	adjusted odds ratio	exchange ratio	
Characteristics	7					
Total	14		5		2.7	
Sex						
Women †	15	1.00	5	1.00	2.9	
Men	14	0.91*	5	1.09*	2.6	
Age group						
25 to 29 †	14	1.00	11	1.00	1.4	
30 to 34	19	1.12*	6	0.59*	4.0	
35 to 39	15	0.87*	3	0.37*	4.3	
40 to 44	10	0.58*	2	0.30*	3.0	
Family status	TV	0.50	L	0.00	5.0	
Childless persons						
	,	0.52*	2	0.17*	2.0	
Adult child living with parents	6	0.52*	2	0.16*	2.8	
Non-family (person living alone or with	7	1.00	1.5	1.00	0.0	
roommates) †	7	1.00	15	1.00	0.8	
Persons in a couple	19	1.73*	10	1.00	2.2	
Persons with children						
Lone parents	8	1.27*	5	0.46*	1.8	
Married or common-law parents						
Were parents in 2001, no other children						
since	14	1.67*	1	0.23*	6.1	
Were parents in 2001, at least one new						
child since	19	2.24*	1	0.17*	11.8	
Had their first child between 2001 and						
2006	28	3.11*	4	0.37*	7.7	
Had their first children between 2001 and						
2006 (2 or more children)	34	4.08*	2	0.19*	16.9	
Highest level of education attained						
No high school diploma	9	0.76*	3	0.82*	2.6	
High school diploma	12	0.89*	4	0.95	2.6	
College or vocational school diploma †	16	1.00	5	0.7.2	2.9	
University degree, bachelor's	16	0.79*	7	1.78*	2.7	
University degree, master's or doctorate	10	0.77	,	1.70	L.1	
A L D L L L L L A	13	0.51*	10	2.61*	2.4	
(including medical studies) After-tax family income	10	0.51	10	2.01	۷.۲	
Under \$20,000	5	0.25*	12	4.32*	0.9	
\$20,000 to \$39,999	8	0.23	10		1.2	
				3.40*		
\$40,000 to \$49,999	14	0.52*	6	2.38*	2.4	
\$50,000 to \$59,999	18	0.66*	4	1.69*	3.8	
\$60,000 to \$69,999	23	0.85*	3	1.28*	5.3	
\$70,000 to \$79,999 †	25	1.00	2	1.00	6.9	
\$80,000 to \$99,999	23	0.92	2	1.00	5.7	
\$100,000 to \$149,999	20	0.88*	2	0.89	5.8	
\$150,000 and over	17	0.75*	2	0.99	4.0	

Table A.2 Characteristics associated with the probability of moving from the municipality of Montréal to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44 (continued)

	Moved from the municipality of Montréal to a surrounding municipality		Moved from a surrounding municipality to the municipality of Montréal		migration between the central municipality and other municipalities	
	percentage	adjusted odds ratio	percentage	adjusted odds ratio	exchange ratio	
Low-income status after-tax						
No	16	***	5	***	3.0	
Yes	5		10		1.2	
Mother tongue						
English	11	0.85*	6	0.92	2.1	
French †	17	1.00	5	1.00	2.4	
Other	11	0.82*	6	0.91	5.0	
Place of birth						
Canada ¹ †	18	1.00	5	1.00	2.4	
Canada, with at least one immigrant parent	11	0.65*	7	1.14*	2.6	
South America	11	0.79*	8	1.81*	5.0	
Europe	13	0.87*	6	1.50*	4.5	
Africa	11	0.76*	8	1.40*	5.8	
Middle East	13	1.06	4	0.75	6.5	
East Asia	11	0.86	5	0.77	5.8	
Southeast Asia	7	0.47*	9	2.19*	2.8	
South Asia	6	0.44*	7	1.49	5.6	
United States, Oceania and others	12	0.66*	6	1.35	2.4	
Place of work						
City of Montréal †	11	1.00	10	1.00	2.1	
Rest of the Island of Montréal	18	1.73*	6	0.55*	2.9	
Other area municipalities outside the Island						
of Montréal	44	5.95*	2	0.13*	5.7	
Outside the CMA	21	2.26*	3	0.24*	3.5	
No fixed place of work	14	1.46*	5	0.36*	2.5	
No place of work	7	1.03	4	0.32*	3.0	

t reference group

Net intrametropolitan

 $[^]st$ difference statistically significant compared to the reference group at p < 0.05

^{1.} Includes persons born outside Canada but who are nevertheless Canadian by birth. Source: Statistics Canada, 2006 Census of Population.

Table A.3 Characteristics associated with the probability of moving from the municipality of Vancouver to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44

14 14 14 12 18 16 11	1.00 0.94 1.00 1.13* 0.98 0.75*	percentage 4 4 4 7 5 3 2	1.00 1.11* 1.00 0.72* 0.50*	exchange ratio 1.8 1.8 1.7 0.9 2.0
14 14 14 12 18 16	1.00 0.94 1.00 1.13* 0.98	4 4 4 7 5 3	1.00 1.11* 1.00 0.72*	1.8 1.7 0.9
14 14 12 18 16	1.00 0.94 1.00 1.13* 0.98	4 4 7 5 3	1.00 1.11* 1.00 0.72*	1.8 1.7 0.9
14 14 12 18 16	1.00 0.94 1.00 1.13* 0.98	7 5 3	1.00 1.11* 1.00 0.72*	1.8 1.7 0.9
14 12 18 16 11	0.94 1.00 1.13* 0.98	7 5 3	1.11* 1.00 0.72*	1.7 0.9
14 12 18 16 11	0.94 1.00 1.13* 0.98	7 5 3	1.11* 1.00 0.72*	1.7 0.9
12 18 16 11	1.00 1.13* 0.98	7 5 3	1.00 0.72*	0.9
18 16 11	1.13* 0.98	5	0.72*	
18 16 11	1.13* 0.98	5	0.72*	
16 11	0.98	3		
11				2.7
	0.75	/	0.37*	2.7
7		_	0.37	2.2
7				
	0.75+	,	0.00+	0.4
7	0.75*	1	0.09*	2.6
•				0.1
				0.6
19	2.44*	7	0.73*	1.8
13	1.90*	2	0.34*	1.8
12	1.85*	1	0.24*	2.4
19	3.01*	1	0.22*	4.4
27	4.21*	3	0.33*	4.9
29	4.72*	2	0.24*	6.3
12	0.78*	3	0.98	1.8
13	0.83*	3	0.95	1.8
		3		2.1
				1.5
17	0.03	,	2.10	1.5
13	0.62*	6	2.70*	1.7
10	0.02	0	2.70	1.7
9	0.82	7	2 28*	0.9
				1.1
				1.5
				2.1
				2.6
				2.7
				2.7
	1.01	2	0.93	3.4
12	0.75*	3	1.20	2.0
	12 19 27 29 12 13 16 14 13 9 12 13 16 17 17 18 17	19	19 2.44* 7 13 1.90* 2 12 1.85* 1 19 3.01* 1 27 4.21* 3 29 4.72* 2 12 0.78* 3 13 0.83* 3 16 1.00 3 14 0.85* 7 13 0.62* 6 9 0.82 7 12 0.88* 6 13 0.84* 5 16 0.94 3 17 1.00 3 18 0.96 2 17 1.01 2	19 2.44* 7 0.73* 13 1.90* 2 0.34* 12 1.85* 1 0.24* 19 3.01* 1 0.22* 27 4.21* 3 0.33* 29 4.72* 2 0.24* 12 0.78* 3 0.98 13 0.83* 3 0.95 16 1.00 3 1.00 14 0.85* 7 2.10* 13 0.62* 6 2.70* 9 0.82 7 2.28* 12 0.88* 6 1.88* 13 0.84* 5 1.58* 16 0.94 3 1.31* 17 0.97 3 1.12 17 1.00 3 1.00 18 0.96 2 1.01 17 1.01 2 0.93

Net intrametropolitan

Table A.3 Characteristics associated with the probability of moving from the municipality of Vancouver to a surrounding municipality in the metropolitan area between 2001 and 2006 for persons aged 25 to 44 (continued)

	Moved from the municipality of Vancouver to a surrounding municipality		Moved from a s municipalit municipality of	y to the	Net intrametropolitan migration between the central municipality and other municipalities
	percentage	adjusted odds ratio	percentage	adjusted odds ratio	exchange ratio
Low-income status after-tax					
No	15		4		1.9
Yes	11		5		1.2
Place of birth					
Canada ¹ †	17	1.00	4	1.00	1.7
Canada, with at least one immigrant parent	13	0.75*	5	1.19*	1.4
South America	15	0.82	5	1.44*	1.8
Europe	14	0.73*	4	1.13	1.6
Africa	14	0.82	3	1.01	1.9
Middle East	15	1.01	5	1.45*	1.1
East Asia	13	0.72*	5	1.34*	2.2
Southeast Asia	13	0.63*	4	1.20	2.5
South Asia	16	0.67*	1	0.37*	4.0
United States, Oceania and others	13	0.67*	2	0.64*	3.5
Place of work					
City of Vancouver †	9	1.00	11	1.00	1.1
Other municipalities in the CMA	26	3.93*	2	0.18*	2.8
Outside the CMA	14	2.34*	2	0.19*	2.3
No fixed place of work	13	1.76*	4	0.30*	1.5
No place of work	11	1.54*	2	0.23*	2.2

[†] reference group

Source: Statistics Canada, 2006 Census of Population.

 $^{^{\}star}$ difference statistically significant compared to the reference group at p < 0.05

^{1.} Includes persons born outside Canada but who are nevertheless Canadian by birth.

Table A.4 Profile of population aged 25 to 44 in 2006, by place of residence, 2006

			Place of re	esidence		
	Toronto CMA Montréal CMA		Vancouv	er CMA		
	Surrounding municipalities	Central municipality	Surrounding municipalities	Central municipality	Surrounding municipalities	Central municipali
			percen	tage		
Characteristics	100	100	100	100	100	100
family status				59	44	
Childless persons	38	56	38			67
Adult child living with parents	15	14	9	10	12	11
Non-family (person living alone or with			1.0	0.0	1.5	0.0
roommates)	9	23	13	29	15	33
Persons in a couple	15	19	16	20	18	24
Persons with children	62	44	62	41	56	33
Lone parents	5	6	7	7	6	4
Married or common-law parents (total)	57	38	55	34	50	29
	37	30	33	04	50	<i>L</i> /
Were parents in 2001, no other children since	29	18	30	15	26	13
	L 7	10	30	13	20	13
Were parents in 2001, at least one new	13	8	11	8	11	6
child since	13	0	11	0	11	0
Had their first child between 2001 and	10	0	0	0	0	7
2006	10	8	9	8	9	7
Had their first children between 2001		•			,	0
and 2006 (2 or more children)	5	3	5	3	4	3
lighest level of education attained	100	100	100	100	100	100
lo high school diploma	8	9	11	10	8	7
ligh school diploma	23	20	18	16	24	19
ollege or vocational school diploma	35	29	45	36	37	30
Iniversity diploma, bachelor's	27	31	21	26	23	33
Iniversity diploma, master's or doctorate	21	01	á. í	20	20	00
including medical studies)	8	11	5	11	7	11
After-tax family income	100	100	100	100	100	100
Inder \$20,000	6	15	7	21	11	18
520,000 to \$39,999	13	22	17	30	18	23
540,000 to \$49,999	9	11	12	12	10	11
550,000 to \$59,999	10	10	13	10	10	9
\$60,000 to \$69,999	10	8	12	7	10	8
570,000 to \$79,999	10	7	10	6	9	7
580,000 to \$99,999	17	10	14	7	13	9
5100,000 to \$149,999	19	11	11	5	13	10
				_		
150,000 and over	7	6	3	2	5	4
Low-income status after-tax	100	100	100	100	100	100
No .	90	81	91	75	85	80
/es	10	19	9	25	15	20
Place of birth	100	100	100	100	100	100
Canoda ¹	24	21	74	45	34	29
Canada, with at least one immigrant parent	26	23	11	15	21	23
South America	7	9	3	9	2	3
urope	10	10	4	9	7	7
Africa	3	4	2	8	2	1
Aiddle East	3		2	4	2	2
Viorie Eazi	3	4	7	4	7	2

Table A.4 Profile of population aged 25 to 44 in 2006, by place of residence, 2006 (continued)

	Place of residence						
	Toront	o CMA	Montré	al CMA	Vancouver CMA		
	Surrounding municipalities	Central municipality	Surrounding municipalities	Central municipality	Surrounding municipalities	Central municipality	
			percen	tage			
Place of birth (continued)							
East Asia	7	11	1	3	14	20	
Southeast Asia	5	7	1	3	6	9	
South Asia	13	11	1	3	9	3	
United States, Oceania and others	1	1	1	1	3	3	
Place of work	100	100	100	100	100	100	
Downtown	25	62	32	63	16	53	
Surrounding municipality	53	14	48	13	58	24	
Outside the CMA	3	2	4	2	3	2	
No fixed place of work	10	10	8	7	12	10	
No place of work	9	13	8	15	11	11	
Tenure	100	100	100	100	100	100	
Renter	15	47	24	68	28	54	
Owner	85	53	76	32	72	46	
Type of housing	100	100	100	100	100	100	
Single house	59	25	63	7	44	19	
Semi-detached or row house	23	15	10	7	14	5	
Apartment	18	60	27	86	42	77	
Number of rooms in dwelling	100	100	100	100	100	100	
2 or less	17	54	30	65	35	64	
3	39	28	45	27	30	14	
4 or more	44	18	25	8	35	22	
Mode of transportation to get to work	100	100	100	100	100	100	
Car	85	52	84	51	80	54	
Public transit	13	37	12	36	15	26	
Walking, cycling or other	3	11	4	12	6	20	
Median distance between place of work and place of residence (in km)	12	7	12	6	9	4	

^{1.} Includes persons born outside Canada but who are nevertheless Canadian by birth. Source: Statistics Canada, 2006 Census of Population.

Table A.5 Selected occupations and percentage of persons aged 25 to 44 who moved to or from a central municipality between 2001 and 2006

Moved from a central municipality to a surrounding municipality

Moved from a surrounding municipality to a central municipality

	Toronto	Montréal	Vancouver	Toronto	Montréal	Vancouver
			perce	ntage		
Occupations						
All persons aged 25 to 44 (including						
those without an occupation)	14	14	14	5	5	4
Senior management occupations	13	19	15	4	4	4
Business, finance and administrative occupations	16	18	17	5	4	4
Managers in art, culture, recreation and sport	9	7	11	11	5	11
Business, finance and administrative occupations	15	20	16	6	7	6
Professional occupations in natural and applied						
sciences and similar occupations	20	18	15	6	7	7
Technical occupations related to natural and						
applied sciences	19	18	16	5	6	5
Health occupations	12	17	13	6	6	8
Nurse supervisors and registered nurses and						
technical and similar health sector personnel	16	18	17	4	4	4
Judges, lawyers and Quebec notaries	6	18	16	13	11	14
Postsecondary and university professors and						
assistants	5	6	7	13	26	12
College, secondary and elementary school						
teachers and support personnel	15	18	16	5	5	5
Writing, translation and public relations						
professionals	8	11	11	12	11	8
Creative and performing artists	5	6	9	14	12	12
Photographers, graphic arts technicians and						
technical and coordinating occupations in						
motion pictures, broadcasting and performing arts	6	10	11	12	11	9
Creative designers and craftpersons	10	10	12	9	11	6
Other occupations related to arts and culture	6	12	4	7	12	8

^{1.} This category excludes managers in art, culture, recreation and sport. Source: Statistics Canada, 2006 Census of Population.

Table A.6 Destination of persons aged 25 to 44 who moved from a central municipality to a surrounding municipality

	Immigrant status and country of birth					
		Canada ¹	Canada	Autres pays		
	Total	Parents born in Canada	With at least one immigrant parent	lmmigrants		
		pei	centage			
Destination From the city of Toronto to	100	100	100	100		
Mississauga	20	18	18	21		
Brampton	17	9	11	21		
Markham	15	7	11	19		
Vaughan	12	6	17	12		
Richmond Hill	8	5	6	9		
Ajax	6	9	7	5		
Oakville	5	10	6	3		
Pickering	5	7	5	4		
Others	13	28	19	7		
From the city of Montréal to	100	100	100	100		
Rest of the Island	7	4	12	11		
Laval	25	16	41	41		
Longueuil	9	10	6	10		
Terrebonne	7	8	6	5		
Repentigny	5	7	3	3		
North Shore (others)	24	29	18	13		
South Shore (others)	23	27	14	17		
From the city of Vancouver to	100	100	100	100		
Burnaby	22	16	23	26		
Richmond	16	9	15	22		
Surrey	17	16	13	20		
Coquitlam	8	8	9	7		
Delta	7	9	7	5		
New Westminster	6	10	6	4		
Others	24	32	28	16		

^{1.} Persons born outside Canada but who are nevertheless Canadian by birth. Source: Statistics Canada, 2006 Census of Population.

Fortin, A., Després, C. and Vachon, G. (2002). La banlieue revisitée. Québec: Éditions Nota Bene.

Statistics Canada. (2008a). Family Portrait: Continuity and Change in Canadian Families and Households in 2006, 2006 Census. Statistics Canada Catalogue no. 97-553. Ottawa: Minister of Industry.

^{3.} City of Montreal. (2007). 2008-2009

Family Action Plan. Strategies adopted to retain and attract families include tax benefits that might be granted to young couples when they become first-time homeowners, free public transit for children or measures aimed at promoting an increased feeling of safety among residents, particularly young parents.

^{4.} For the city of Vancouver, see http://vancouver.ca/commsvcs/socialplanning/initiatives/childcare/ccgrants1.htm. For the city of Toronto, see http://www.toronto.ca/children/subsidy.htm.

^{5.} In the country's other large metropolitan areas such as Ottawa-Gatineau, Calgary or Edmonton, surrounding municipalities are much less numerous and densely populated than in the three largest CMAs. Consequently, the question of moves from the central municipality to surrounding municipalities is a bit less relevant there.

^{6.} It should be noted that this article does not deal directly with urban sprawl. In fact, the boundaries between central and surrounding municipalities do not allow the various elements to be taken into account in studies on urban sprawl (population densities, usage mixing, etc.) to be adequately measured.

- Dion, P. and Coulombe, S. (2008). Portrait of the Mobility of Canadians in 2006: Trajectories and Characteristics of Migrants. Catalogue No. 91-209. Ottawa: Minister of Industry.
- 3 Canada Mortgage and Housing Corporation. (2009). Renovation and Home Purchase Report.
 - Myers, D. and Gearin, E. (2001). "Current preferences and future demand for denser residential environments." Housing Policy Debate. 12(4), 633-659.
- 9 Michielin, F. and Mulder, C. H. (2008). "Family events and the residential mobility of couples." *Environment and Planning A* 40(11), 2770-2790.
- Freitjen, P. and Mulder, C. H. (2002). The timing of household events and housing events in the Netherlands: A longitudinal perspective, Housing Studies, 76(5), 773-792.
- 11. Karsten, L. (2007). "Housing as a way of life: towards an understanding of middleclass families' preference for an urban residential location." Housing Studies. 22(1), 83-98.
 - Mazanti, B. (2007). "Choosing residence, community and neighbours Theorizing families' motives for moving." Geographiska Annaler: Series B, Human Geography. 89(1), 53-68.
- 12. Wagner, F. W., Joder, T. E., Mumphrey, A. J., Akundi, K. M. and Artibise, A. F. J. (2005). Revitalizing the City: Strategies to Contain Sprawl and Revive the Core. Armonk: ME Sharpe.
 - Thorkild, A. (2006). "Residential choice from a lifestyle perspective." Housing, Theory and Society. 23(2), 109-130.
- 13. For example, if only parents with incomes of \$50,000 or more are examined, the proportion of lone parents or heads of single-parent families who left the central municipality in the Montréal area was only 12%. The corresponding proportion for new parents of a single child was 36%. There were similar discrepancies in the Toronto and Vancouver areas.
- 14. Canada Mortgage and Housing Corporation. (1996). Housing the New Family: Reinventing Housing for Families. Research Highlights. Socio-Economic Series, 23.

- 15. Thiebout, C. (1956). "A Pure Theory of Local Expenditures." Journal of Political Economy. 64, 416-424.
- 16. Wagner et al. (2005).
- Downs, A. 1997. The Challenge of our Declining Big Cities. Housing Policy Debate. 8(2), 359-408.
- 18. Family income can vary considerably from one year to another. Therefore care must be taken in interpreting data since 2005 income is used to characterize greater or lesser propensity to have migrated between 2001 and 2006. That being said, one can be confident of the validity of the results since the relationships observed in Tables 1.a, 1.b and 1.c follow trends identical to those obtained when we focus solely on central municipality/surrounding municipality migrations between 2005 and 2006 (results not shown).
- 19. For example, according to the 2006 Census, the average value of a single house in the city of Toronto was a little over one-half million dollars (\$506,000). In the city of Brampton, a municipality located west of Toronto that is experiencing strong demographic growth (+33% between 2001 and 2006), the average cost of housing of this type was about \$375,000. There are some non-central municipalities where average single house costs are even higher than in the central municipality, for example, Richmond Hill, in the Toronto area, Westmount, in the Montréal area and West Vancouver, in the Vancouver area. In general, however, prices are significantly lower in the outskirts than downtown,
- Glaeser, E, L., Kolko, J., and Saiz, A. (2001). "Consumer City." Journal of Economic Geography. 1, 27-50.
- Shaienks, D., Gluszynski, T., and Bayard,
 J. (2008). Postsecondary Education
 Participation and Dropping Out:
 Differences Across University, College and
 Other Types of Postsecondary Institutions.
 Statistics Canada Catalogue no.
 81-595-M. Ottawa: Minister of Industry.
- 22. Dielman, F. M., and Evaraers, P. C. J. (1994). "From renting to owning: Life course and housing market circumstances." Housing Studies. 27(3), 11-25.

- 23. Glaeser, E. L., and Gottlieb, J. D. (2006). "Urban resurgence and the consumer city." Urban Studies. 43(8).
- 24. Florida, R. (2005). Cities and the Creative Class. New York: Routledge.
- 25. Storper, M., and Manville, M. (2006). "Behaviour, preferences and cities: Urban theory and urban resurgence." *Urban Studies*. 43(8), 1247-1274.
- 26. For more details, see Statistics Canada. (2007). The Evolving Linguistic Portrait, 2006 Census. Statistics Canada Catalogue no. 97-555. Ottawa: Minister of Industry. Multiple responses are distributed equally among the languages reported.
- 27. Teixeira, C. (2007). "Residential experiences and the culture of suburbanization: A case study of Portuguese homebuyers in Mississauga." Housing Studies. 22(4), 495-521.
- 28. Haan, M. (2005). Are immigrants Buying to Get in? The Role of Ethnic Clustering on the Homeownership Propensities of 12 Toronto Immigrant Groups, 1996-2001. Statistics Canada Catalogue no. 11F0019MIE. Ottawa: Minister of Industry.
- 29. Statistics Canada. (2008b). Immigration in Canada: A Portrait of the Foreignborn Population, 2006 Census, No. 97-557-XIF in the catalog. Ottawa: Minister of Industry.
- 30. Statistics Canada. (2008b).
- 31. Fréchette, L., Desmarais, D., Assogba, Y., and Paré, J.-L.(2004). "L'intégration des jeunes à la ville : une dynamique de repérage spatial et social.» La migration des jeunes. Aux frontières de l'espace et du temps. Chapter. 2. p. 81-105. Published under the direction of P. Leblanc and M. Molgat.
- 32. Glaeser et al. (2001).
- 33. Zukin, S. (1998). "Urban lifestyles: Diversity and standardisation in spaces of consumption." *Urban Studies. 35*(5). 825-839. Glaeser et al. (2001). Karsten, L. (2007).

Looking for health information online?

Link up with Statistics Canada's Guide to Health Statistics!



he Guide to Health Statistics is a series of online links that lead you to health information published by Statistics Canada.

Let www.statcan.gc.ca's Guide to Health Statistics be your passage to the world of health information. In the Guide you'll discover links to:

- ⇒ vital statistics
- ⇒ cancer statistics
- ⇒ health determinants
- ⇒ health status
- ⇒ health care issues
- ⇒ and much more...

Find the information you need now.

Link up to a great number of online products, documents and surveys like the National Population Health Survey. The Guide to Health Statistics allows you to search and locate exactly what you're looking for.

Save time. A few clicks and you'll be connected to health information from www.statcan.gc.ca, your source for health facts and analysis.

Access anywhere, anytime. You get current detailed information quickly and efficiently thanks to continuous

updates, regardless of location and time constraints.

Put the data to work.

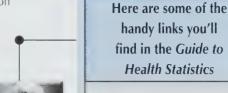
Copy text from online right into your documents and databases.

Expertise you can trust! You can count on relevant. dependable information with

a unique focus on Canada-wide indicators from Statistics Canada. So, when you're on the lookout for firstrate health facts and analysis, allow the Guide to Health Statistics to be your bridge to health

information. It's easy!

Visit our site at www.statcan.gc.ca.



Links to insightful analysis and data on:

⇒ Cancer

Health Surveys

- ⇒ Canadian Community Health Survey (CCHS)
- ⇒ National Population Health Survey (NPHS)
- ⇒ Smoking and Tobacco Use Surveys
- ⇒ Health Care Survey

Sample links to related sites:

- ⇒ Canadian Cancer Statistics
- ⇒ Canadian Institute for Health Information
- ⇒ Health Canada
- ⇒ Canadian Health Network



Health information? We've got connections!

Making fathers "count"

by Pascale Beaupré, Heather Dryburgh and Michael Wendt

Introduction

Once considered the "forgotten parent", fathers have been the focus of numerous studies in recent decades. This shift has taken place against a backdrop of major social and economic changes: more people spending more time pursuing higher levels of education; weaker marital ties (with common-law unions becoming more common and marriage losing popularity); and increased participation of women in the labour force. As women have been encouraged to enter the public sphere, men have been occupying a greater place in the domestic sphere. Once confined to the role of breadwinner, today's fathers are more likely to be involved in the day-to-day care giving of children (see "Fathers involvement").

Until quite recently studies on the family focused mainly on mothers. However, many national surveys interview men and women and data on fathers are available, yet few studies examine parenthood from the father's perspective. There are several reasons for this. First, the field of sociology of the family maintains that the family sphere and care of children are mainly the concern of women. Second, the notion that men's family experiences merely lirror those of women, albeit with a two to ree year time lag, has led researchers to study parental and family paths almost exclusively from the female perspective.²

Of the studies that have been done on fatherhood, most have examined paternal involvement or compared the maternal and paternal behaviours and the needs of particular subgroups of fathers (especially lone-parent fathers). In these studies, researchers stress that statistics specifically relating to fathers are rare. 3,4,5 Although there is information that can be used to draw a detailed portrait, more often than not fatherhood is examined from the perspective of the census family or the marital relationship.6

This article fills the gap identified by researchers by describing the situation of fathers in Canada. Using data from the 1995 and 2006 General Social Survey (GSS) on the family, this article describes changes in the profiles of fathers during this period. In particular, it examines the sociodemographic, conjugal and family characteristics of fathers. The article focuses on the overall situation of fathers; it does not seek to analyse the more specific realities of some types of fathers (immigrant, gay, teenage or inmate fathers) (see "What you should know about this study").7

Fathers: an overview

The 1995 General Social Survey estimated that there were 4,167,000 fathers with at least one child aged 18 or under. Slightly more than ten years later, there were 4,266,000. an increase of 2.3%. In comparison, the total population grew by 11.2% during the same period.

The average age of fathers is rising

Effects of the overall population aging are reflected in the age distribution of fathers. Several factors—young people leaving the parental home at older ages, men forming conjugal unions at older ages, becoming parents at later ages, and forming new unions, and thus second families. sooner after a previous union breaks down—all contribute to the rising age of fathers.

The average age of fathers now exceeds 40: it was 41.6 years in 2006, compared to 39.8 in 1995 (Table 1) — an increase of 1.8 years over the study period.

Although the age distribution of fathers reveals that slightly more than three-quarters were between 30 and 49 years of age in both 1995 and 2006, this masks major changes over the period. In 1995, nearly 44% of fathers were in their thirties and 36% were in their forties. Some ten years later, the situation was reversed: 33% were aged 30 to 39 and 44% were in their forties. Additionally, the proportion of fathers in their fifties increased from 10% in 1995 to 15% in 2006.

On the other hand, the distribution of fathers according to the age of the youngest child shows that the

What you should know about this study

Before drawing a portrait of fathers in Canada, it is necessary to specify what is meant by "father." At first glance, this seems quite simple, but over time the paternal sphere has become increasingly complex. 1.2.3.4.5 A look to the past reveals that the word "father" has had various meanings, depending on the period. Beyond a simple biological bond between a child and an adult male, the current meaning of fatherhood also has a social construction. As Dubeau and her colleagues put it, "To be a father, it takes more than to be a procreator!" 6

The data in this article are drawn from two different GSS cycles on the family: cycle 10, conducted in 1995, and cycle 20, conducted in 2006. The target population includes all non-institutionalized persons 15 years of age or older living in the ten provinces. In 1995, 10,749 persons were interviewed by telephone. Of them, slightly more than 4,800 were males. In the 2006 survey, just over 23,600 persons, including slightly more than 10,350 males, were interviewed.

Fathers interviewed by the GSS are identified in two stages. First, all the links among the members of each household contacted were determined. This allows for the identification of men who were living in a household that included their own or other children. The children in the household may have been the man's biological or adopted children, his spouse's children or the children of another member of the household with whom he is living (co-tenant, friend or other related member).⁷

The GSS also includes a section on the respondent's children. In addition to validating the information collected on household composition, this section identifies fathers according to whether or not they are living with their biological or adopted children.

With these two steps, the fathers for this study were identified. Fathers were defined as between age 18 to 65 at the time of the survey who were living with or reported having fathered, adopted or reared a child who was 18 years of age or under at the time of the survey. The resulted in a sample of 1,749 fathers in 1995 and 3,080 in 2006, and includes fathers, stepfathers and fathers who do not necessarily live with their children.

The information presented illustrates the distribution of fathers according to various characteristics. To evaluate the statistical significance of the variations observed, the proportions were first estimated using the weights from the GSS survey; then the estimate of variance of these estimates was verified using the bootstrap method. Statistical significance was calculated according to a threshold of 5% (p < 0.05). In this article, only statistically significant results are commented on.

The statistics outlined in this article provide a snapshot of fatherhood at a specific point in time. Following the example of Desrosiers and her colleagues, it would be useful to adopt a more dynamic perspective on fatherhood by tracing men's conjugal and parental paths.⁸

- Belleau, H. (2004). Être parent aujourd'hui: la construction du lien de filiation dans l'univers symbolique de la parentalité. Enfances, Familles et Générations, Fall (1). http://www.erudit.org/ revue/efg/2004/v/n1/008891ar.htm
- 2 Doucet, A. (2006). Do Men Mother? Fathering, Care, and Domestic Responsibility. Toronto: University of Toronto Press, 350 p.
- Ioyal, R. (2006), Parenté, parentalité et filiation: Des question cruciales pour l'avenir de nos enfants et de nos sociétés. Enfances, Familles et Générations, Fall (5). http://www.erudit.org/ revue/efg/2006/v/n5/015778ar.html
- 4 Korff-Sausse, S. (2009). Éloge des pères. Paris: Hachette Littératures, 156 p.
- 5 Marcil-Gratton, N., C., Le Bourdais and H. Juby (2003). Être père au XXI^e siècle: vers une redéfinition des hommes auprès des enfants, in La démographie québécoise. Enjeux du XXI^e siècle, published under the direction of V. Piché. Montréal: Les Presses de l'Université de Montréal, pp. 144-175.
- 6 Dubeau, D., M. E. Clément and C. Chamberland. (2005). Le père, une roue du carrosse familial à ne pas oublier! État des recherches québécoises et canadiennes sur la paternité. Enfances, Familles et Générations, Fall (3). http://www.erudit.org/ revue/efg/2005/v/n3/012534ar.html
- 7 This distinction based on the child's status cannot be captured using the census since the only basis for determining relationships among household members is via the reference person.
- 8 Desrosiers, H., H. Juby and C. Le Bourdais (2000). Male Family Paths, in *Canadian Families at the Approach of the Year* 2000, published under the direction of Y. Peron. Statistics Canada catalogue no. 96-321, pp. 155-206.

Table 1 Distribution of fathers by different age indicators, Canada, 1995 and 2006

	Fathers		
	1995 †	2006	
	perce	ntage	
Age of father			
18 to 29	10.1	8.1	
30 to 39	43.5	33.4*	
40 to 49	35.9	43.6*	
50 to 65	10.4	14.9*	
Age of youngest child			
0 to 4	38.5	32.7*	
5 to 12	36.0	39.2*	
13 to 18	25.4	28.1*	
	уе	ars	
Average age of father	39.8	41.6*	
Average age of youngest child	7.6	8.3*	

† reference group

statistically significant difference from the reference group at p < 0.05

Source: Statistics Canada, General Social Survey, 1995 and 2006.

proportion of fathers with preschoolage children declined between 1995 and 2006. Whereas 39% of fathers had a child less than 5 years of age in 1995, this was the case for 33% of fathers roughly ten years later. By 2006, fathers whose youngest child was between 5 and 12 years of age (39%) or between 13 and 18 years of age (28%) were proportionally more numerous than in 1995 (Table 1).

A larger proportion of fathers living common-law

Forty years ago, marriage was the norm and it was through marriage that most people formed couples and integrated into family networks. Almost all children were born to married parents and grew up with them. Today, many children either are born outside of marriage or experience the divorce of their parents while they are still young.

Despite these changes, the majority of fathe are married. While the proportions of married and divorced fathers declined, the proportion of unmarried fathers,

either in common-law unions or without a spouse, increased. This increase was largely due to the growing popularity of common-law unions, both for forming a union and for creating a family (especially in Quebec). Nearly 18% of fathers were living in a common-law union in 2006, compared to 13% in 1995.

In 2006, the region of residence continued to be a factor in the type of conjugal relationship: common-law unions were more widespread among Quebec fathers, while marriage was the predominant type of union for fathers in the provinces outside of Quebec.

Between 1995 and 2006, GSS data show a marked change in the types of conjugal relationships formed in Quebec, where the attractiveness of marriage declined in favour of common-law unions. For example in 2006 less than half of Quebec fathers were married. The gap that had previously existed between married fathers and fathers in common-law unions had narrowed substantially: by 2006 nearly 40% of Quebec fathers

were living in common-law unions (Table 2). Elsewhere in Canada, the proportion of married fathers did not change significantly, but the proportion of fathers in common-law unions was up slightly.

Finally, the proportion of fathers without spouses remained fairly stable, ranging between 10% and 12% depending on the period and region.

In 2006 fathers more likely than in 1995 to be the head of a lone-parent family

The complexity of Canadians' marital histories has led to a diversification in the types of families (see "Definitions"). While there has been a decline in the number of families with two parents who have only ever been married to each other, other types of families, such as step and lone-parent families, have emerged. Consequently, there are a growing number of men entering unions that include children from a partner's previous relationship.

Despite this, a majority of fathers live in an intact two-parent situation: in 2006 just over 3,169,000 fathers were living with their spouse and children (birth or adopted).

Separations and divorces, which have become increasingly common, result in an increase in the number of lone parents. From 1995 to 2006, the proportion of fathers who were lone-parents rose from 5% to 8% (Table 3). The number of lone-parent fathers stood at more than 338,000 in 2006. With the growing popularity of common-law unions, the number of never-married lone-parent fathers has increased, while the number of divorced or separated lone-parent fathers declined. Compared to the children of fathers living in an intact two-parent situation, the children of lone-parent fathers tended to be older: in 2006, half of fathers heading a lone-parent family were living with children aged 5 to 12. When dad and mom lived together, the proportion of dads with children aged 5 to 12 was 38%.

Table 2 Distribution of fathers by marital status, Quebec and other provinces, 1995 and 2006

	Fathers				
	Quebec		Other pr	ovinces	
	1995 †	2006	1995 †	2006	
		perc	entage		
Marital status					
Married	61.8	48.4*	81.4	79.0	
Common-law	26.4	39.7*	8.6	10.8*	
No spouse	11.8	11.9	10.0	10.1	

reference group

Table 3 Distribution of fathers by family type, Canada, 1995 and 2006

	Fathers		
	1995 †	2006	
	percentage		
Family type			
Intact family	76.0	74.3	
Lone-parent family	5.3	7.9*	
Stepfamily	11.5	13.4*	
With no children in household	7.2	4.4*	

[†] reference group

Some fathers do not live with their children (birth or adopted) and their children live with the mother or elsewhere. The proportion of fathers without any children in their home declined significantly, going from 7% in 1995 to 4% some ten years later (Table 3). In 2006, there were slightly more than 186,000 fathers with this living arrangement. The increasing number of fathers with custody of their children reflects an increase in lone-parent fathers and the decrease in fathers who are living without their children and is mainly due to the fact that mothers are less frequently being awarded sole custody of children following a union breakdown.8

The average age of fathers who were not living with their children was 44.5 years in 2006. As was the case for lone-parent fathers, fathers without children in their household had older children: in 2006, 34% of these fathers had children between 5 and 12 years of age, while 55% had children between 13 and 18 years of age.

As a result of marital instability, the number of stepfamilies has grown: in 2006, approximately 572,000 fathers (13%) lived in a stepfamily. This was up slightly from 1995 (12%). Among fathers in stepfamilies, there was an even split between those in marriages and those in common-law unions.

In most cases, stepfamilies are what is known as "simple": they include the children of just one of the spouses. For fathers living in a stepfamily, two family statuses are considered: a) the men were childless or their children were not living with them when the stepfamily was created; and b) the men were already living with children when they formed the union (either children born outside of a union or children born in a union since dissolved). Data show that it was more common for men to form a union that includes only the children of the female partner.

Simple stepfamilies become complex following a birth of another child. Among fathers living in a blended family with children born or adopted within the new union, the majority were raising the children of just one sibling relationship, usually the woman's child. The distribution of fathers in stepfamilies by the age of their children was similar to the distribution of fathers in intact families. In 2006, 30% of fathers in stepfamilies had children aged 0 to 4, 44% had children aged 5 to 12, and 27%, children aged 13 to 18.

Although families have changed and there are more types of family structures, most dads lived with their children full-time. Indeed in 2006, eight-in-ten fathers lived full-time with their children—about the same as in 1995 (Table 4).

Shared custody is increasingly common. ^{10,11} As a result, fathers whose children lived with them parttime were more common than were fathers whose children did not live with them. In 2006, 11% of fathers had at least one child living part-time in their household, while a smaller proportion (5%) did not live with any of their children. In comparison, in 1995, 8% had at least one child living under their roof part-time and 7% did not live with any of their children (Table 4).

 $^{^{\}star}$ statistically significant difference from the reference group at p < 0.05 Source: Statistics Canada, General Social Survey, 1995 and 2006.

 $^{^{\}star}$ statistically significant difference from the reference group at p < 0.05 Source: Statistics Canada, General Social Survey, 1995 and 2006.

Table 4 Distribution of fathers by residence status of children in the household, Canada, 1995 and 2006

	Fathers		
	1995 †	2006	
	perce	entage	
Residence status of children in father's household			
All children live there full-time	81.8	80.6	
At least 1 child lives there part-time ¹	7.6	11.4*	
At least 1 child lives elsewhere ²	3.4	3.5	
All children live elsewhere	7.2	4.5*	

- reference group
- statistically significant difference from the reference group at p < 0.05
- May include a mixture of situations, with some children living elsewhere and some children living in the household full-time or part-time.
- May include a mixture of situations, with some children living elsewhere and some children living in the household full-time, but no child living in the household port-time.

Source: Statistics Canada, General Social Survey, 1995 and 2006.

Fatherhood is beginning later in life

The most common path to fatherhood is biological: slightly more than nine in ten fathers become fathers with the birth of their first child. However, a man can also become a parent by other means such as adoption¹² or by becoming a stepfather. From 1995 to 2006, the proportion of men whose first parental experience occurred as the result of family blending changed very little: in 2006, for about 9% of fathers the first experience of fatherhood was as a stepfather, in 1995 the corresponding proportion was 8%.

In Canada, the age at which people become parents is rising. A number of studies emphasize that during the past 20 years, there has been a decline in the fertility rate of Canadian women in their twenties, while the rate for women in their thirties has risen steadily. ^{13,14} Following the upward trend in the average age of women at the time of their first birth, the average age ¹⁵ of fathers at the time of their entry into fatherhood increased significantly from 27.8 to 29.1 between 1995 and 2006.

A growing proportion of fathers are employed

Obviously, the social condition of fathers in Canada varies according to their family type. Whether they are alone or are part of a two-parent family, fathers are stakeholders in the economic realities of their families: they are subject to job insecurity and unemployment, and they are exposed to income insecurity, indebtedness and the conditions linked with these situations. Studies on the economic conditions of fathers as a group are few or non-existent. Studies that have been done focus mainly on the economic condition of lone fathers, 16,17

The GSS provides information on employment status¹⁸ and income and how these change over time. The vast majority of all fathers in Canada are gainfully employed. While about 90% of fathers had a job in 1995, in 2006 the proportion was 94%. Research out of the United States has stressed that fathers living with at least one child under 18 years of age assign more importance to participating in the labour force and devote more hours to their labour market participation per week than men who have older children or who

have never experienced fatherhood. 19 Fathers living with minor children recognize that they have obligations and responsibilities and have taken on the role of a "good provider."

During the study period, the unemployment rate among males aged 15 and over dropped substantially-from 9.8% in 1995 to 6.5% in 2006. As a result, it is not surprising that all types of fathers saw their employment status stabilize or improve. Fathers heading a loneparent family registered the largest advance in employment status, with the proportion employed increasing from 77% in 1995 to 87% in 2006. This improvement in employment status may be related to the fact that increasing numbers of fathers are awarded sole custody of their children following a union breakdown. These fathers may not be able to count on financial support from the other parent and must have a regular job to support their family and ensure its wellbeing.

Among all types of fathers, the highest proportion with employment was found among fathers in two-parent families (intact or step): slightly more than 9 in 10 had a job. Conversely, a smaller proportion (80%) of fathers without children in the household had a job. During the study period, the employment status of fathers not living with their children remained stable.

Almost 6 in 10 fathers have a personal income of \$50,000 or more

The GSS collects information on income, ²⁰ both personal and household. This article focuses on personal income, as it is the situation of fathers and not the situation of their households (which may include the income of other household members) being described. For some fathers, household income is equal to personal income. This is the case with lone-parent fathers, most fathers with no children in their household and fathers whose spouse is unemployed.²¹

Father's involvement

Some research on parental involvement with children has been conducted in Canada in recent years, leading to the belief that fathers of today are more involved with their children than their own fathers were with them. Today fathers are involved during the pregnancy, they are present at ultrasounds, they help with the labour and birth, and are present and involved in the lives of their young children. 1

One explanation for the increasing active participation of fathers is a result of women's increased participation in the labour force.² This, coupled with the less traditional division of family roles and responsibilities by mothers and fathers as well as the desire of fathers themselves to be closer to their children are factors that may explain this growing role for fathers. Given the growing diversity of families in Canada,³ and the known importance of fathers' involvement with their children, it is important to understand the level of involvement of fathers for each family type – lone fathers. fathers in reconstituted families, or fathers who do not live with their children – compared with fathers in intact families.

Father involvement can vary depending on the age of the child and their level of dependence.⁴ The 2006 GSS data show that fathers who had a child in the year prior to the survey were more likely to take paid or unpaid leave at the time of the child's birth than were fathers who had a child 5 years prior to the survey.⁵ However, when the data are disaggregated by father type it is clear that fathers in intact families were significantly more likely to take paid or unpaid parental leave than were lone-parent fathers or fathers whose children did not live with them.

Work responsibilities can affect the amount of time parents spend with their children throughout their early years. However, in the 2006 GSS when fathers were asked how often in the past 12 months it had been difficult to fulfill their family responsibilities because of the amount of time they spent on their job, there was no difference between fathers in the four family arrangement types. About 85% of fathers in each type of family arrangement indicated they experienced this difficulty either never or sometimes. Similarly, when fathers were asked whether they found it difficult to concentrate or fulfill their work responsibilities because of their family responsibilities over 92% of fathers in each family arrangement type said 'never' or 'sometimes.'

One factor related to father involvement in families where there is a separation or divorce is the existence of a legal agreement on the amount of time the child spends with each parent. According to 2006 data, lone fathers who were living with their children and had separated or divorced in the previous 5 years were much more likely than fathers not living with their children to have an agreement with their ex-spouse or partner related to the time the child spends with each parent as well as an agreement on who makes the major decisions for the child. This, and the fact that lone fathers have custody of their children, may account for the significantly higher likelihood that lone fathers reported being involved 'all of the time' with their children's regular care (such as school, daycare or social activities) and decisionmaking over the 12 months prior to the survey, compared with fathers not living with their children.

There were no significant differences between lone fathers, fathers in reconstituted families or fathers not living with their children in their satisfaction with the amount of time they spent with their children. Between two-thirds and threequarters of fathers in these family types were satisfied or very satisfied with the time they spent with their child or children.

References

- 1. Doucet, A. (2006). Do Men Mother? Fathering, Care, and Domestic Responsibility, Toronto: University of Toronto Press, 350 p. Eggebeen, D. J., and Knoester, C. (2001). Does Fatherhood Matter for Men? Journal of Marriage and the Family, 63(2), 381-429.
- 2. Marshall, K. (2006), Converging Gender Roles. Perspectives on Labour and Income, 7(7). Statistics Canada catalogue no. 75-001. http://www.statcan.gc.ca/pub/75-001-x/10706/9268-eng.htm
- 3. Béchard, M. (2007). Family Structure by Region (revised). Statistics Canada catalogue no. 89-625, no. 1, 12 p. http://www.statcan.gc.ca/ pub/89-625-x/89-625-x2007001-eng.pdf Milan, A., Vézina, M., and Wells, C. (2007). Family Portrait:
 - Continuity and Change in Canada Families and Households in 2006, Census Analysis Series, Statistics Canada catalogue no. 97-553. http://www12.statcan.gc.ca/english/census06/ analysis/famhouse/pdf/97-553-XIE2006001.pdf
- 4. Flouri, E., and Buchanan, A. (2003). What Predicts Fathers' Involvement with their Children? A Prospective Study of Intact Families. British Journal of Developmental Psychology, 21, 81-98.
- 5. Beaupré, P., and Cloutier, E. (2007), Navigating Family Transitions: Evidence from the General Social Survey. Statistics Canada catalogue no. 89-625, no. 2, 28 p. http://www.statcan.gc.ca/pub/89-625-x/ 89-625-x2007002-eng.pdf

From 1995 to 2006, the personal income of all types of fathers increased.²² In 1995, about 29% of fathers reported a personal income of less than \$30,000. The proportion fell to 16% in 2006 (in constant dollars). There was also a reduction, although not as large, in the proportion of fathers with personal incomes of between \$30,000 and \$50,000: 26% in 2006 compared to 37% in 1995. There was a much greater change, in a positive direction, in the proportion of fathers with a personal income of \$50,000 or more—from 35% in 1995 to 58% in 2006 (Table 5).

The personal financial situation of fathers in intact families was the opposite of fathers not living with their children: in 2006, 60% of fathers without children in the home had a personal income of less than \$50,000, while about the same proportion of fathers in intact families had an income of \$50,000 or more (Table 5).

Fathers with personal income of

The personal income of fathers living in stepfamilies was close to that of fathers of lone-parent families. However, fathers of loneparent families were proportionally more likely have a personal income of \$30,000 or less (data not shown).

A link can be established between education and income. Overall, the vast majority of fathers had finished high school: in 2006, 88% of dads had a high school diploma. The proportion of dads who had completed postsecondary studies increased from 48% in 1995 to 60% in 2006. Compared to fathers in intact families, fathers without children in the home and fathers in stepfamilies were more likely not to have finished high school – the same fathers that were more likely to have incomes of \$30,000 or less.

Most fathers lived in a home owned by someone in their household

Income differences across various family types are likely associated with diverse lifestyles: people with more income tend to have more lifestyle choices than people with less income. How a family is housed is one of the revealing indicators of its lifestyle. Between 1985 and 2006, the proportion of Canadians who lived in dwellings owned by a member of the household increased gradually from approximately 70% to 78%.²³ The same trend emerges for fathers between 1995 and 2006: the number of fathers living in a dwelling owned by a member of the household rose from 76% to 83%.

Between 1995 and 2006, apart from lone-parent fathers, the proportion of all groups of fathers whose residence was owned by a member of the household increased. The increase was the largest among fathers in stepfamilies (from 67% to 80%) and fathers with none of their children in the household (from 50% to 61%) (Table 6).

The data show a few variations among father groups as to access to ownership. Of all fathers, those

Table 5 Distribution of fathers by family type and personal income, Canada, 2006

	Less than \$50,000	\$50,000 and more†		
	percentage			
Family type				
Intact family	38.5*	61.5		
Lone-parent family	49.8*	50.2		
Stepfamily	48.1*	51.9		
With no children in household	60.1*	39.9		
Total	41.6*	58.4		

- reference group
- statistically significant difference from the reference group at p < 0.05
- Expressed in constant dollars, according to 2002 Consumer Price Index.

Source: Statistics Canada, General Social Survey, 2006.

Table 6 Distribution of fathers by family type and living in a dwelling owned by a member of the household, Canada, 1995 and 2006

	Fathers			
	1995 †	2006		
	percentage			
Family type				
Intact family	81.5	87.0*		
Lone-parent family	59.2	66.5		
Stepfamily	67.2	80.1*		
With no children in household	50.1	61.4*		
Total	76.4	83.4*		

- reference group
- statistically significant difference from the reference group at p < 0.05

Source: Statistics Canada, General Social Survey, 1995 and 2006.

living in intact families had the greatest access to ownership, with nearly 90% of them in 2006 living in a dwelling owned by a member of the household. They were followed by fathers in stepfamilies (80%). Fathers in lone-parent families and those with no children in the home had comparable access to ownership: of the fathers in these two groups, more than 60% in 2006 lived in a dwelling owned by a member of the household. This lower incidence may be related to the fact that these two groups of fathers had the lowest personal incomes among the groups.

Summary

Major social transformations resulting from the growing fragility of conjugal unions and the two-fold movement of the liberation of women and their entry into the labour force, have changed both the representation of fatherhood and how it is practised in daily life. Once considered only an authority figure and a breadwinner, today's fathers actively participate in the day-to-day care giving and emotional support of their children.

In 2006, there were an estimated 4,266,000 fathers with at least one child under 18 years of age, up from 4,167,000 in 1995. The aging of the overall population is reflected in the age distribution of fathers—in 2006, the average age of fathers was over 40. The proportion of fathers with preschool-aged children declined between 1995 and 2006. Conversely, the proportion of fathers whose youngest child was between 5 and 12 or between 13 and 18 years of age grew over the same period.

While the proportion of married or divorced fathers declined between 1995 and 2006, the proportion of unmarried fathers rose. This increase was mainly due to the growing popularity of common-law unions. Despite this, the majority of fathers were married. However, there were regional differences: marriage was the predominant type of union for fathers outside Quebec, while commonlaw unions were more prevalent for Quebec fathers.

Definitions

Intact two-parent family: refers to a man who lives with a female spouse/partner and the children (biological or adopted) born of their relationship.

Lone-parent family: refers to a man, without a spouse/partner, who lives with at least one of his children (biological or adopted).

Stepfamily: refers to a man who lives with a spouse/partner and at least one child who is not born or adopted of their relationship. A stepfamily may bring together children born or adopted outside the current union, with these being children of one or both partners, sometimes supplemented by children common to the couple.

With no children in the household: refers to a man who has fathered or reared one or more children and who does not live with any of his children (biological or adopted) at the time of the survey.

Children: refers to blood, step or adopted sons or daughters aged 18 or under at the time of the survey. These children may or may not live (either full-time or part-time) with their father.

The majority of fathers lived in an intact two-parent situation. However other paternal situations have emerged. The proportion of fathers as lone parents or within stepfamilies has risen since 1995. Conversely, the proportion of fathers not living with their children has declined over time.

Whether they are on their own or in a two-parent family, the vast majority of fathers in Canada were employed. All groups of fathers saw their employment status stabilize or improve between 1995 and 2006. Fathers in lone-parent families experienced the largest increases in employment status. Additionally, all groups of fathers registered an increase in personal income. The personal financial situation of fathers living in intact families was the most favourable. Conversely, lone-parent fathers and fathers without children in the home had the most vulnerable financial situation.

Of all fathers, those living in intact families had greater access to home ownership. In contrast, fathers in lone-parent families and fathers not living with their children were less likely to own their own homes.



Pascale Beaupré and Michael Wendt are senior analysts in the Social and Aboriginal Statistics Division and Heather Dryburgh is a manager in the Microdata Access Division of Statistics Canada.

- Lamb, M. E. (1975). Fathers: Forgotten Contributors to Child Development. Human Development, 18(4), 245-266.
- 2. Desrosiers, H., H. Juby and C. Le Bourdais (2000). Male Family Paths in Canadian Families at the Approach of the Year 2000, published under the direction of Y. Peron. Catalogue no. 96-321, Statistics Canada, pp. 155-206.
- 3. Conseil de la famille et de l'enfance (2008). L'engagement des pères: le rapport 2007-2008 sur la situation et les besoins des familles et des enfants, Government of Quebec, 120 p. http://www.cfe.gouv.qc.ca/publications/rapports.asp?categorie=1101104
- 4. Dubeau, D., M. Clément and C. Chamberland (2005). Le père, une roue du carrosse familial à ne pas oublier! État des recherches québécoises et canadiennes sur la paternité, Enfances, Familles et Générations, Fall (3). http://www.erudit.org/revue/efg/2005/v/n3/012534ar.html. http://www.erudit.org/revue/efg/2005/v/n3/012534ar.html

- 5. Forget, G. (2005). Image de pères: une mosaïque de pères québécois. Institut national de santé publique du Québec, Government of Quebec, 47 p. http://www.inspq.qc.ca/publications/notice.asp?E=p&NumPublication=347
- 6. Conseil de la famille et de l'enfance (2008).
- Limitation owing to the data source used; the GSS does not lend itself to making reliable estimates on such small population groups.
- Moyer, S. (2004). Child Custody Arrangements: Their Characteristics and Outcomes. Department of Justice Canada.
- Juby, H., H. Marcil-Gratton and C. Le Bourdais (2001). A Step Further in Family Life: The Emergence of the Blended Family in Report on the Demographic Situation in Canada 2000, published under the direction of A. Bélanger, Y. Carrière and S. Gilbert. Statistics Canada catalogue no. 91-209-XWE, pp.169-203.
- 10. Institut de la Statistique du Québec (2006). La situation interne de 55 à 65 ans au cours de la décennie 1995-2005. La situation démographique du Québec: Bilan 2006. Government of Quebec, 340 p.

- 11. Dubeau, D., et al. (2005).
- 12. Only a very small number of fathers first experience fatherhood through adoption.
- Girard, C. (2008). Le bilan démographique du Québec, Édition 2008, Institut de la statistique du Québec, Government of Quebec, 79 p.
- 14. Statistics Canada. (2008). Births. The Daily, September 26, Catalogue no. 11-001. http://www.statcan.gc.ca/dailyquotidien/080926/dq080926a-eng.htm
- 15. For men who experience fatherhood through adoption or formation of a blended family, it is their age when the child (or children) arrive in the household that marks the beginning of parenthood.
- 16. Dulac, G. (2008). Pères n° 1, Les pères monoparentaux au Québec: un portrait. Laboratoire Masculinités, rôle et genres, 11 p. www.rvpaternite.org/fr/paternite/ documents/1-peresmono.pdf
- Galarneau, D. (2005). Education and income of lone parents. Perspectives on Labour and Income, 6(12). Statistics Canada, Catalogue no. 75-001.

- 18. Based on the respondent's main labour force activity during the twelve months preceding the survey. The main activity is defined as the activity to which the respondent devoted the most time. This can be work (in paid employment or selfemployment), job-seeking, pursuing an education, etc.
- Eggebeen, D. and C. Knoester (2001).
 Does Fatherhood Matter for Men? Journal of Marriage and the Family, 63(2), 381-429.
- 20. Respondents were asked to provide their most accurate estimate of total income before deductions, from all sources, in the past twelve months.
- 21. Note that household income is likely to be less accurately estimated than personal income, since it is provided by one person, who does not necessarily know the income of all members of the household.
- 22. Expressed in constant dollars (according to the 2002 Consumer Price Index).
- 23. Dryburgh, H. and M. Wendt (2008). Have patterns of living in owned dwellings, compared to rented dwellings, changed since 1985? Matter of Fact, (2). Statistics Canada catalogue no. 89-630, 4 p. http://www.statcan.gc.ca/pub/89-630-x/2008001/article/10647-eng.pdf

Foreign nationals working temporarily in Canada

by Derrick Thomas

Introduction

Like many countries, Canada grants foreign nationals the right to remain and work here temporarily. The number of individuals admitted annually on a temporary basis has been growing faster than the number of permanent immigrants. Some of these non-permanent residents are admitted under the Temporary Foreign Worker Program expressly to fill jobs in Canada. Others are admitted temporarily in order to study in Canada, as refugee claimants or under special temporary resident permits. Students and youth on exchange programs, claimants and holders of other permits are sometimes permitted to work while in Canada in order to support themselves or gain practical experience in their field of study.

Many non-permanent resident workers are restricted to a particular occupation, location or employer. Working in a specified job or location is often a condition of their admission. They may not be able to pursue other opportunities or react to changes in labour market conditions. There is some concern that the inability to change employment may adversely affect their working conditions or remuneration vis-à-vis those of other workers. 1 For instance, issues have been raised with respect to female temporary migrants who perform domestic and caregiving work outside their country of origin.²

This article explores the characteristics of non-permanent resident workers who were enumerated in the 2006 Census of Canada (see "What you should know about this study" for more information). It looks at the countries from which non-permanent resident workers came

and the skills they brought to Canada. This article also examines how these workers were involved in the Canadian economy and determines if the compensation they received for their work was commensurate with the compensation received by comparable permanent residents.

What you should know about this study

While over 112,000 of the non-permanent residents enumerated worked in Canada at the time of the 2006 Census, the primary focus of this article is the over 94,000 enumerated non-permanent residents who worked full time (more than 30 hours per week). Comparisons are made with Canadian-born workers, established immigrants or foreign-born permanent residents (arrived before 2001 or more than 5.5 years before the 2006 Census), and recently arrived immigrants (arrived in 2001 or later, i.e., within 5.5 years of the census).

Reference is made to each of the last four census periods reflecting approximately 15 years of Canadian workforce history. The focus is on the past decade and especially on the most recent census in 2006. Demographic and human capital characteristics are compared across groups and over time. Special emphasis is placed on occupations, industries of employment and earnings.

Differences in age, gender, education and weeks worked, among other things, could easily explain any difference in earnings between non-permanent residents and other workers. Thus, a multivariate human capital model is used to ensure that all measurable factors are considered when earnings per week are compared. Since the census asks only about earnings in the previous calendar year, earnings information pertains only to those who also worked full time in 2005. Weekly earnings are computed by dividing annual earnings by the number of weeks worked. Earnings information is available for about 73,000 non-permanent residents.

Although there is some undercounting of the non-permanent resident population, the census is the only source of comprehensive socioeconomic information about what temporary residents are doing and earning in Canada (see "Coverage of temporary residents in the Census of Canada"). It is also the only data source that allows for comparisons with permanent residents.

More non-permanent residents enumerated in 2006 than in any previous census

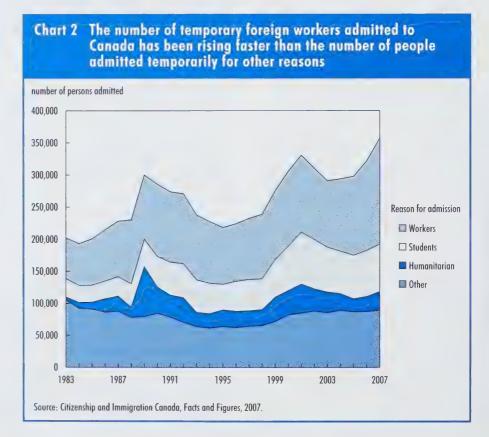
In 2006, the census enumerated about 265,000 non-permanent residents—more than in any previous census. About 230,000 were 15 years of age or older—an increase of nearly 60% between 1996 and 2006 (Chart 1). Among the adult nonpermanent resident population, over 112,000 were working in Canada on Census Day, an increase of 118% from 1996. Of these, about 94,000 were working full time (30 hours a week or more)3. While they constitute less than 1% of all full-time workers in Canada, non-permanent residents play an important role in the labour market in some regions, sectors and occupations.

Census data are supported by data from Citizenship and Immigration Canada (CIC), which show that the number of persons who come temporarily to Canada to work is the fastest growing segment of the temporary resident population (Chart 2).⁴

Temporary workers are admitted to the country in order to address specific labour shortages in Canada, to facilitate the transfer of staff within multinational companies and to fulfil Canada's obligations under international trade agreements. While administrative data from Citizenship and Immigration Canada are not strictly comparable to census data, both indicate that there are a growing number of non-permanent residents working in Canada.

The increase in the number nonpermanent residents working in

Chart 1 According to the census, full-time workers are the fastest growing segment of the temporary resident population number of temporary residents 250,000 200,000 94,000 150,000 ☐ Full-time workers 57.000 18,800 Part time workers 41,200 Non-workers 13,200 100,000 10,400 117,800 100.900 50,000 10,400 0 1996 2006 2001 Year of admission Source: Statistics Canada, Census of Population, 1996, 2001 and 2006.



Canada may be a result of increased labour market requirements during the economic expansion which ended in the latter part of 2008. According to CIC data, the number of non-permanent residents who entered Canada in 2008 (399,523) exceeded the number of permanent immigrants of all types landed that year (247,243).7 The Temporary Foreign Worker Program was the fastest growing component of nonpermanent admissions. CIC data indicate that there have been three consecutive years of double-digit growth.8 Recent figures indicate numbers have continued to increase modestly even into the recent economic downturn.9

Part of a global trend

Canada is not alone in relying on temporary residents to address some of its labour market requirements. There has been global growth in temporary worker programs in many Organisation for Economic Cooperation Development (OECD) countries. 10 For instance, the admission of temporary workers, treaty traders and intra-company transferees to the United States more than doubled between 1996 and 2006. Including family members, it stood at 2.3 million in 2006, larger than the number of permanent immigrants landed in that year. 11 Temporary admissions now outnumber permanent resettlements in Australia as well. 12 Among all OECD countries, the temporary migration of foreign workers has increased by 4% to 5% per year since 2000.13 Associated with this trend has been a movement toward migration driven by employer requests or job offers as opposed to government macropolicy. 14

Temporary worker programs are attractive because they enable countries to quickly address labour market needs in an expanding economy without the increased costs associated with maintaining unemployed workers during a downturn 15—the costs associated with social and economic integration

are also reduced. Additionally, temporary programs for workers and students can serve as a way of screening and selecting permanent immigrants.

There are also benefits for countries that supply this labour. For example, temporary worker programs may help deal with excess labour supply and provide capital in the form of funds sent back to the home country. These programs also help workers gain human capital and help with the transfer of technology. 16 Employers are also keen on temporary worker programs. 17 These programs allow companies access to wider labour markets and give multinationals more flexibility to transfer staff from country to country.

Non-permanent resident workers also benefit through the money and experience they acquire. Some may qualify to immigrate to Canada permanently. Their willingness to participate in the programs is evidence of the anticipated benefits. Temporary worker programs are often described as 'win-win' strategies. 18 In 2005, the Global Commission on International Migration recommended, "...carefully designed temporary migration programmes as a means of addressing the economic needs of both countries of origin and destination."19

Canada is a signatory to several agreements that allow for the freer movement of temporary workers. They include the North American Free Trade Agreement (NAFTA), the General Agreement on Trade in Services (GATS), and the Asia-Pacific Economic Cooperation Forum. Under NAFTA, traders and investors, intra-company transferees, business visitors and specific categories of professionals are processed more easily. The GATS provides for liberalized trade in services including the movement of professionals and technical experts. The Seasonal Agricultural Workers Program (SAWP) between Canada, Mexico and a number of Caribbean countries provides for the expeditious movement of farm workers. Canada's Live-in Caregiver Program provides for the temporary movement of caregivers and child care workers to Canada from abroad.

Access to the labour market is conditional for most temporary residents

An effort is made to ensure that temporary workers do not compete with permanent residents for jobs. Employers are often required to have a positive Labour Market Opinion (LMO) from a local office of Human Resources and Skills Development Canada (HRSDC) before recruiting a temporary worker from abroad. The LMO attests to the fact that no permanent resident is available for the job, that fair market wages are paid, and that provincial labour standards are met.²⁰ Employers are exempt from obtaining an LMO if they are recruiting persons in certain occupations that are covered by NAFTA and GATS.²¹ Additionally, in some regions the process is expedited for certain occupations known to be in high demand.

Some non-permanent residents, notably refugee claimants, obtain open work permits allowing them to move about in Canada and accept virtually any job without restriction. Other non-permanent residents, usually those coming from abroad specifically to work, receive closed permits that may restrict the type of job they hold, the location where they work and/or the specific employer for whom they work. Students may also be confined to work on campus or in areas related to their studies. About two-thirds of temporary residents with the right to work in Canada between January 2006 and December 2008 were restricted in some way as to their occupation, location and/or employer.²²

Non-permanent residents admitted to Canada under the Temporary Worker Program can bring spouses and close family members with them provided they can demonstrate the financial capacity to support these

family members while in Canada. However, non-permanent residents working in low-wage jobs may not be able to meet this requirement. Some domestic workers and live-in caregivers are, moreover, explicitly prevented from bringing dependants with them.

Non-permanent residents who have permits to work in Canada have the same labour rights and access to health and social programs as other workers in Canada. However, labour standards, employee rights and access to social programs differ according to the province or territory of work²³ and most social programs and many jurisdictions require a minimum period of work or residence in order to qualify for benefits. As a result, some non-permanent residents may not qualify for unemployment, health and social assistance benefits.

Finally, a fundamental difference for non-permanent residents working in Canada is that these workers do not have the right to live permanently in Canada. Work permits and other temporary residence permits are issued for specific reasons and for a fixed period of time. Permit holders may have to leave the country if their reasons for being in Canada are no longer valid or their permits have expired.

Non-permanent residents working full time come from Asia, the United States and the United Kingdom

Many non-permanent residents who worked full time in Canada and were enumerated in the Census of 2006 came from Asian countries (Table 1) and were not unlike permanent immigrant workers who also often came from Asia. However, the countries of origin within Asia differed slightly. While the Peoples Republic of China and India were the top two source countries for Canada's permanent immigrants, the Philippines supplied the greatest number of enumerated non-permanent residents who worked in Canada (Chart 3).

Table 1 Full-time workers by immigration status and place of birth, 2006

Full time workers

	Full-time workers				
	Established immigrants	Recent immigrants	Non- permanent residents†		
		percentage			
Place of birth					
United States	4.0*	2.5*	9.1		
Mexico/Central America	2.5*	2.1*	6.2		
Caribbean	6.5*	3.4*	4.4		
South America	4.6*	5.6	5.3		
United Kingdom/Republic of Ireland	9.9*	2.9*	6.2		
West Europe	15.2*	4.5*	10.7		
East Europe	10.1*	11.2*	4.7		
Africa	5.8*	10.0*	8.1		
West Asia	5.1	7.2*	4.9		
South Asia	10.9*	21.3*	9.9		
South East Asia	11.6*	11.0*	15.9		
East Asia	12.5*	17.1*	11.5		
Other	1.5*	1.4*	3.0		

[†] reference group

Source: Statistics Canada, Census of Population, 2006.

According to census data, the proportion of non-permanent residents working full time in Canada whose country of birth was in South East Asia, Latin America or South Asia increased over the 10 years leading up to 2006. While they remain important source areas, the United States, Europe and the Caribbean have declined in relative importance (Table 4).

Many temporary residents who worked in Canada came from developing countries. Around 63% of those enumerated in the 2006 Census came from countries with a per capita Gross Domestic Product (GDP) of less than half that of Canada's (Table 2).²⁴

Many non-permanent workers were members of a visible minority group. In all, over 62% were members of at least one visible minority group. Almost 14% of non-resident workers indicated that they were Filipino, 11% indicated they were South Asian, 9.7% indicated they were Latin American

and 9.6% indicated they were Black (Table 3).²⁵

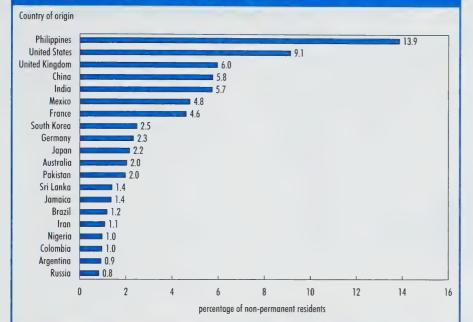
Non-permanent residents just as likely to speak an official language as newly arrived immigrants

The 2006 Census data indicate that non-permanent residents who worked full time in Canada were less likely to speak an official language than were the Canadian-born or established immigrant workers (those who arrived prior to 2001). They were very similar to recent immigrants in terms of official language ability. However, non-permanent residents were a little more likely to speak English than were recent immigrants (Table 1).

Unlike recent immigrants, many non-permanent resident workers reported English as their mother tongue. Tagalog and Spanish were frequently mentioned by non-permanent resident workers as their mother tongue.

 $^{^{}st}$ statistically significant difference from reference group at p < 0.05

Chart 3 The Philippines, followed by the United States and the United Kingdom, were the most common countries of origin for non-permanent residents



Source: Statistics Canada, Census of Population, 2006.

Table 2 Select characteristics of full-time workers, by resident status, 2006

	Full-time workers						
	Canadian- born	All immigrants	Recent immigrants	Non- permanent residents†			
		in y	ears				
Select characteristics							
Mean age	40.4*	43.6*	36.3*	35.1			
	percentage						
Female	43.1*	42.4*	40.3	41.0			
Visible minority	2.9*	55.4*	73.1*	62.7			
Born in low GDP country	0.0*	60.0*	83.6*	62.8			
Married	64.2*	73.2*	75.4*	59.6			
City or town dweller	77.3*	94.3*	97.2*	92.1			
University degree	20.6*	29.7*	51.0*	46.1			
Postsecondary certificate	40.0*	36.4*	24.6*	26.7			
Speaks English	86.9*	95.2*	90.5*	91.2			
Speaks French	35.4*	16.3*	16.9	17.5			
No official language	0.0*	2.3*	5.6	5.7			
Works in non-official language	1.3*	15.0*	21.0	21.2			
	in hours						
Mean hours worked per week	43.7*	43.8*	43.1*	44.8			

t reference group

In 2006, both non-permanent residents and recent immigrants who held full-time jobs were more likely than established immigrants to use a language other than French or English regularly or most of the time at work.

Most reside in towns and cities

Non-permanent resident workers live in the most populous areas and in the largest markets. According to the 2006 Census almost half (47%) lived in Ontario, about 18% lived in Quebec. 16% lived in British Columbia and 12% lived in Alberta. The proportion that lived in Alberta doubled between 1991 and 2006, such that by 2006 non-permanent resident workers comprised 1% of the full-time workforce in that province (Table 5). According to CIC, the number of temporary work permits issued to persons in or destined for Alberta increased fourfold between 2001 and 2007. The very low unemployment rate in Alberta in 2006 (3.4% or half the national rate in 2006) may have been a factor in the demand for these workers.

Almost one-third of non-permanent resident workers lived in the census metropolitan area of Toronto in 2006, about 15% lived in Montreal, 12.5% lived in Vancouver, 5.5% in Calgary and 3.7% in Edmonton (Chart 4).

While the majority of enumerated non-permanent resident workers lived in towns and cities in Canada, they were slightly more likely to live in less populated settings than were immigrants (Table 2). This likely reflects the influence of special programs for temporary agricultural workers.²⁶

Interestingly, some smaller cities have a relatively large proportion of temporary workers. For example, in Leamington, a well-known vegetable growing area in Ontario, almost 1 in 10 full-time workers were non-permanent residents. In Canmore, a growing resort area in Alberta, just over 2% of the full-time workforce was made up of non-permanent resident workers.

 $^{^{\}ast}$ statistically significant difference from reference group at p <0.05 Source: Statistics Canada, Census of Population, 2006.

Some non-permanent resident workers have an ongoing connection to Canada

Temporary work permits issued by Citizenship and Immigration Canada vary in their duration. The average validity period for all the work visas valid on Census Day 2006 was about 16 months. CIC guidelines indicate that visas allowing holders to work for up to 3 years can be issued to intra-company transferees and professionals covered under the NAFTA and GATS agreements. Refugee claimants can be issued work visas valid for up to 2 years. Many workers have permits that are limited to 1 year. Youth on exchange programs are often limited to 6 months. Extensions can be granted, however, and 2006 Census data indicate that 29% of enumerated non-permanent resident workers resided in Canada 5 years before the census date. Over 77% had been in the country at least 1 year (Chart 5).

While it is possible that some of these full-time workers could have left and returned to Canada at some point during the 5 years, the data indicate an ongoing connection to Canada.

Many non-permanent residents change status, becoming permanent residents. In fact some programs are explicitly designed to facilitate the permanent immigration of persons admitted temporarily to work or study. The recently established Canadian Experience Class²⁷ is one example. Refugee claimants may also become permanent residents if their claims are accepted. According to 2006 Census data, over 30% of the workers who became landed immigrants between 2001 and 2006 had lived in Canada before the 2001 Census.

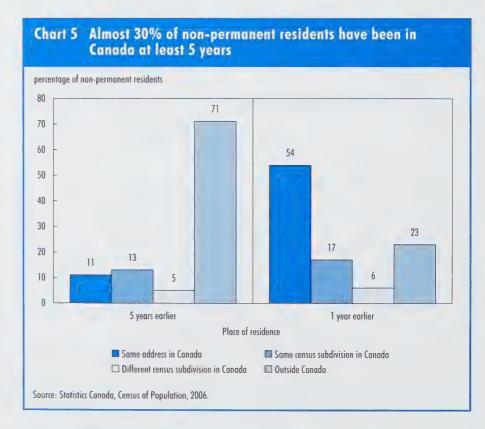
They are younger than permanent residents

Temporary residents who work full time have been younger than Canadian-born and immigrant workers in every census since they were first identified in 1991 (Table 4).

The mean age for temporary residents who worked full time in

Chart 4 Non-permanent residents working full time made up 9% of all full-time workers in Leamington, Ontario in 2006 Leaminaton, Ontario Canmore, Alberta 2.4 Toronto, Ontario Vancouver, British Columbia Wood Buffalo, Alberta Brandon, Manitoba Yellowknife, Northwest Territories Calgary, Alberta Montréal, Quebec Brooks, Alberta 10 Temporary resident workers as a proportion of all full-time workers Note: Includes only temporary residents working full time.

Source: Statistics Canada, Census of Population, 2006.



the census reference week was just over 35 years. They were, on average, about 5 years younger than the Canadian-born population working full time and about 8 years younger than all immigrant workers. Female temporary residents who worked full time in 2006 were younger than their male counterparts.

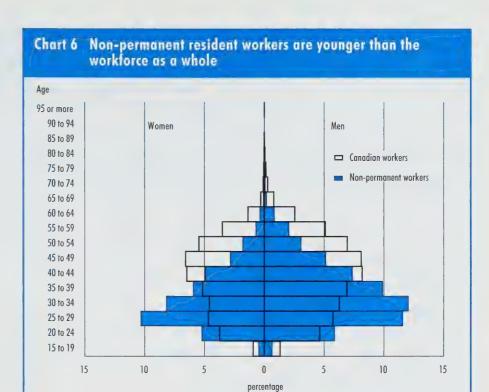
While the majority of full-time workers in Canada are male, female participation rates have been rising steadily. By 2006, 43% of all full-time workers in Canada were female. In the same year, 40% of temporary residents working full time were female (Table 4). On the whole, women are not overrepresented among temporary workers, although they dominate certain occupations.

Many are university-educated

In 2006, non-permanent resident workers enumerated in the census had higher levels of education than Canadian-born and established immigrant workers. While nonpermanent resident workers were more likely to have postsecondary education in general, they were also more likely to have a bachelor's degree or a degree above the bachelor level (Chart 7). Over the long term, there has been an increase in the educational qualifications of non-permanent residents working in Canada. The percentage of nonpermanent residents with degrees increased from 24% in 1991 to 46% in 2006 (Table 4).

According to the 2006 Census, over one-third (38%) of permanent residents who worked full-time in Canada had no postsecondary training. This was true for 27% of non-permanent residents who worked full time.

While non-permanent resident workers were more likely to have higher levels of education than Canadian-born or established immigrants in the labour force, they were not quite as well educated as Canada's most recent immigrants. About one-half (50.9%) of full-time workers who had become permanent



Source: Statistics Canada, Census of Population, 2006.

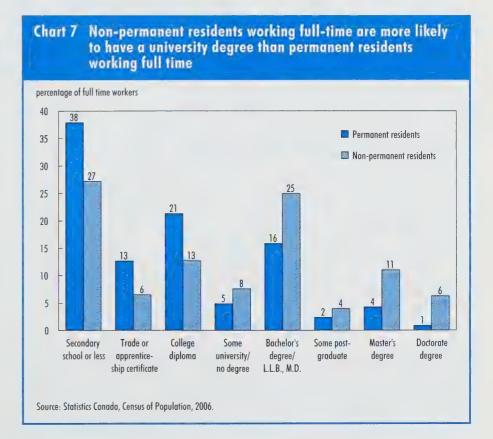


Table 3 Full-time workers by population group and immigration status, 2006

	Full-time workers					
	Canadian- born	All immigrants	Recent immigrants	Non- permanent residents†		
		perce	ntage			
Population group						
Arab	14.0*	64.1*	18.8*	3.1		
Black	24.3*	61.3*	11.4*	3.1		
Chinese	15.6*	69.7*	13.2*	1.5		
White	88.7*	9.9*	1.1*	0.3		
West Asian	3.9*	71.8*	22.0*	2.4		
East Asian	12.1*	67.2*	18.7	2.1		
Latin American	9.2*	67.5*	17.1*	6.2		
Korean	10.3*	63.5*	20.8*	5.4		
Japanese	60.9*	24.9*	7.5*	6.7		
Filipino	9.5*	65.9*	18.2*	6.5		

t reference group

Source: Statistics Canada, Census of Population, 2006.

Table 4 The proportion of non-permanent residents who work full time, by select characteristics, select years

	Non-permanent residents who work full time				
	1991	1996	2001	2006†	
		in y	ears		
Characteristics					
Mean age	32.9*	34.4*	35.3	35.1	
		perce	ntage		
Female	44.6*	38.2*	36.8*	41.0	
City or town dweller	94.4*	92.5*	91.7*	92.1	
University degree	24.5*	36.8*	40.5*	46.1	
Married	50.8*	57.5*	61.2*	59.6	
Speaks English	90.9*	89.8*	88.7*	91.2	
Speaks French	13.1*	17.4*	18.5*	17.4	
No official language	5.8*	6.2*	7.2*	5.7	
Visible minority	68.1*	54.6*	52.6*	62.7	
		in h	ours		
Mean hours worked n week	43.2*	45.3*	45.0	44.8	

t reference group

residents within the five years preceding the 2006 Census held a university degree, compared with 46% of temporary resident workers.

Reflecting the countries from which they came, temporary workers were more likely to have received their education outside Europe, the United States, Australia or New Zealand. They were very like recent immigrants in this respect.

They worked in a variety of jobs

Non-permanent residents enumerated in the census were found in a wide variety of occupations. The jobs they held were, in part, a reflection of the particular temporary foreign worker program under which many entered the country. As a consequence, the occupations held by non-permanent residents differ from those of other full-time workers.

The most common occupations held by non-permanent residents reflect a combination of skilled occupations which typically require a great deal of formal training and comparatively unskilled occupations which do not require such training. For example the occupation 'nannies and parents' helpers' has accounted for the largest single share of nonpermanent resident workers since 1991. In 2006, over 9% of all nonpermanent residents who worked full time were occupied as nannies and parents' helpers compared to less than 1% of full-time workers in general (Chart 8). Farm workers, housekeepers and cleaners were also common occupations for nonpermanent residents.

Conversely, non-permanent residents were also frequently employed as postsecondary teaching and research assistants. Over 6% held these jobs in 2006, more than twice the proportion recorded in 1991. Many of these individuals were in Canada to study as well as work. Almost two-thirds of the non-permanent residents working full time as teaching or research assistants indicated in the 2006 Census that they had attended an educational

 $^{^{\}star}$ statistically significant difference from reference group at p < 0.05

^{*} statistically significant difference from reference group at p < 0.05Source: Statistics Canada, Census of Population, 1991, 1996, 2001, 2006.

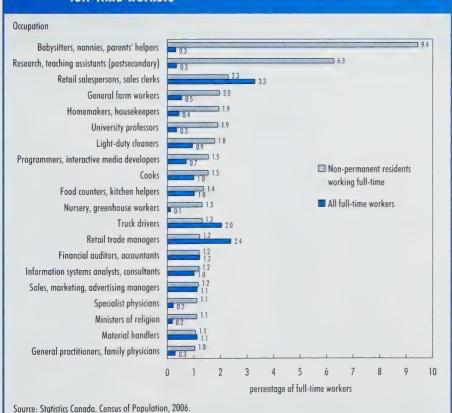
Table 5 Percentage of non-permanent residents working full time in the provinces and territories, select years

	Non-permanent residents working full time				
	1991	1996	2001	2006†	
		perce	ntage		
Province and territories					
Newfoundland and Labrador	0.3*	0.7*	0.5*	0.4	
Prince Edward Island	0.1*	0.1*	0.2*	0.1	
Nova Scotia	0.6*	0.9*	1.1*	0.8	
New Brunswick	0.6*	0.9*	0.8*	0.8	
Quebec	16.3*	20.1*	18.6*	17.8	
Ontario	60.1*	45.8*	48.5*	47.3	
Manitoba	1.5*	2.1*	2.2*	2.4	
Saskatchewan	1.1*	1.7*	1.5*	1.5	
Alberta	6.9*	8.0*	10.9*	12.6	
British Columbia	12.4*	19.5*	15.6*	16.0	
Territories	0.6*	0.2*	0.2*	0.3	

reference group

Source: Statistics Canada, Census of Population, 1991, 1996, 2001, 2006.

Chart 8 Non-permanent residents working full time were more likely to be nannies or teaching and research assistants than all full-time workers



institution at some point since September 2005.

The number of non-permanent residents employed as computer programmers, university professors, scientists and medical doctors has also grown. While most non-permanent residents continue to be employed in low-skilled work, the proportion employed in more skilled occupations has increased somewhat. This may be a result of international trade agreements such as NAFTA and GATS, which allow for the easier movement of professionals.

Education is an important determinant of occupation for all workers, but the jobs of non-permanent residents do not always reflect their training. As expected, almost all non-permanent residents who worked as professors, research assistants and teaching assistants had a university degree. The same was true for over 72% of computer programmers. Not surprisingly, 85% of general farm workers had no education beyond high school.

Less predictably, about 82% of non-permanent residents who worked as nannies had a postsecondary certificate of some type and about 43% had a university degree. In 2006, 85% of non-permanent resident housekeepers and 55% of cleaners had completed postsecondary training. Comparatively few permanent residents employed in these occupations had postsecondary training. For example, about 6% of full-time nannies born in Canada had a university degree.

There were differences in occupations between men and women. The jobs held by men tended more often to be commensurate with their educational qualifications. Over 94% of the non-permanent residents who worked as nannies and parents' helpers were women, while almost 92% of farm workers were men. About 75% of those who worked as cleaners and 88% of housekeepers were women. At the same time, 71% of university professors and 86% of computer programmers were men.

^{*} statistically significant difference from reference group at p < 0.05

While non-permanent residents make up a small percentage of the overall full-time workforce, they constitute a large proportion of certain occupations. As of the census reference week in 2006, over one in five of those employed full time as a nanny or parent's helper was a non-permanent resident (Chart 9). Over 13% of postsecondary teaching and research assistants, 9% of harvesting labours, 8% of nursery workers and 6% of physicists and astronomers were non-permanent residents.

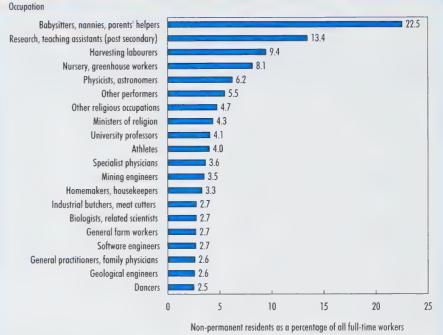
A larger proportion of nonpermanent resident workers are employed in private households and universities and on farms

The industries in which they work are related to the occupations held by non-permanent residents. They were much more likely to work in private households, universities and on farms than other full-time workers. They were also employed by religious organizations more often. Both non-permanent residents and recent immigrants were overrepresented compared to other workers in restaurants, hospitals, computer services, architecture and engineering services, the accommodation industry and in meat processing plants.

According to census data, about 22% of workers employed full time by private households were non-permanent residents in 2006 (Chart 10). Along with recent immigrants, they also made up a large proportion of the relatively small number of workers employed by international and foreign governments and institutions based in Canada (each made up about 13% of those working in these industries).

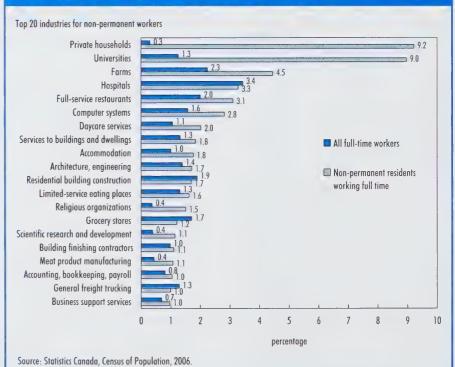
Non-permanent residents enumerated in the census were more likely to work at the location where they live. Almost 12% worked and lived in the same "ace compared to 6% of other workers. Live-in caregivers probably account for a large share of those who work and reside in the same place.

Chart 9 More than one in five full-time babysitters or nannies were non-permanent residents



Source: Statistics Canada, Census of Population, 2006.

Chart 10 Private households and universities were the top two industries for non-permanent residents



Non-permanent residents working full time have lower weekly earnings than other fulltime workers

On average, the weekly earnings of non-permanent residents who worked full time were lower than those of Canadian-born workers and established immigrants. However, the average weekly earnings of non-permanent residents working full time exceeded those of more recent immigrants (those who landed between 2000 and 2005). This may be because a larger proportion of nonpermanent residents are recruited to fill specific vacancies. They know their credentials will be accepted. have prearranged employment, and commence work on arrival. Permanent migrants may take time to find employment. Once established however, permanent immigrants outperform non-permanent residents in terms of earnings.

While the median employment incomes of non-permanent residents working full time are the lowest when compared to the Canadian-born, recent immigrant and established immigrants, there is a large degree of income diversity among nonpermanent workers. Non-permanent residents working full time are found at both ends of the income continuum. For example, about 5% of non-permanent residents earned \$3,000 dollars or more per week in 2005.²⁸ Only about 2.5% of the Canadian-born, 2.7% of established immigrants and 1.4% of new immigrants who worked full time earned that much. At the same time, 46% of non-permanent residents who worked full time earned less than \$500 per week. This was the case for only 23% of the Canadian-born, 25% of established immigrants and 42% of new immigrant workers.

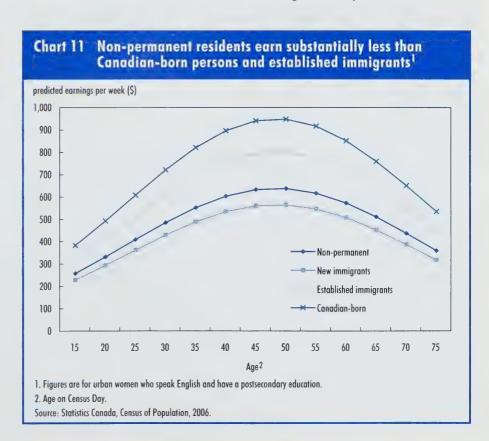
Earnings are influenced by many factors. On average, older experienced workers earn more than younger workers, those with higher levels of education earn more than those with less education and men generally earn more than women.

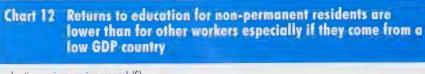
Differences along these dimensions must be carefully controlled when groups are compared. However, the earnings differential between nonpermanent residents and permanent residents persists even when gender. age, marital status, education, official language ability, location and place of birth are the same. For example, analysis shows that, based on 2006 Census data, ²⁹ a 40-year-old married female non-permanent resident with a postsecondary certificate who worked full time and lived in a city could expect to earn about \$602 per week while an equivalent Canadian-born woman could expect to earn about \$895 (Chart 11).

Education generally produces higher earnings, however while returns to education are positive for non-residents working in Canada, they are not as large as the returns to education earned by permanent residents. Returns to education were also negatively affected for those whose country of origin had a per capita GDP of less than one-half that of Canada. That is, the extra amount

earned by a full-time worker with a university degree compared to a worker who had only a high school education was considerably less for non-permanent residents from low-GDP countries. For example, a typical worker with a university degree born in Canada or another high-GDP country earned about \$672 more per week than an equivalent full-time worker with no more than a high school education. However, the education premium for a worker with a university degree decreased by 24% if that person was a non-permanent resident (Chart 12). For a nonpermanent resident who was born in a country with a low per capita GDP, the education premium was 74% lower than that of a Canadian-born full-time worker.

A large part of the explanation for the lower wages of non-permanent residents working full time is related to the occupations in which they work. Many were employed in occupations that are associated with low remuneration. For example, among the occupations listed in the





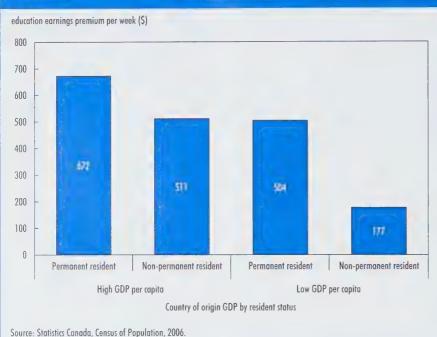
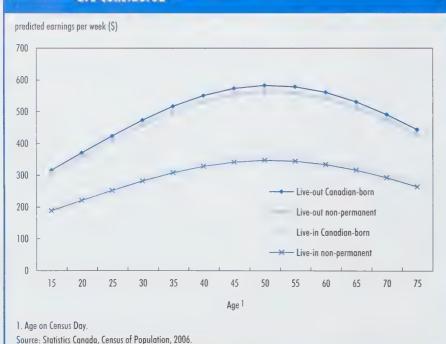


Chart 13 Earnings for domestic workers are similar for Canadianborn and non-permanent residents once live-in situations are considered



National Occupational Classification (NOC) for 2006, "Babysitters, Nannies and Parents' Helpers" had the lowest average earnings per week—this was, coincidentally, the most common occupation for nonpermanent workers. Four of the top ten occupations in which nonpermanent residents worked were in the bottom 5% of occupations in terms of average remuneration. It is important to note, however, that even within occupational groupings non-permanent residents typically earn less than the Canadian-born and established immigrant workers. This may be because they are more likely to hold entry-level or junior positions within the occupation, but explanations for the gap may differ across occupations.

For example, when only those employed as caregivers (e.g., nannies), housekeepers, cleaners and cooks are considered, the earnings gap between non-permanent residents and other workers becomes smaller (Chart 13). If comparisons are limited to looking at only those who work and live in the same place, the weekly earnings of non-permanent residents are almost equivalent to those of the Canadian-born.

The difference in earnings is largely explained by the distribution of non-permanent domestic workers and Canadian-born domestic workers across live-in and non-live-in positions. In 2006 about one-third of all non-permanent residents in domestic occupations worked at and lived in the same location. This was true for only 7% of Canadian-born workers, 5% of established immigrants and under 7% of new immigrants in the same occupations. It may be that the room and board provided to livein help accounts for differences in reported earnings. Under Canada's Live-in Caregiver Program, temporary visas are issued to persons willing to live and work in the homes of Canadian residents.

Coverage of temporary residents in the Census of Canada

Since 1991 the census has explicitly collected information from persons born abroad who are not permanent residents and who are not citizens, but who nonetheless live in Canada.30 Although every attempt has been made to enumerate non-permanent residents, factors such as language difficulties, the reluctance to complete a government form or to understand the need to participate may have affected the enumeration of this population. Non-permanent residents are thought to be under-represented in the Census of Canada. The undercount might be substantial. Program data maintained by Citizenship and Immigration Canada (CIC) indicate that the number of persons legally entitled to reside and work in Canada on Census Day 2006 was about one-third higher than the number enumerated in the census. However, census information on non-permanent residents is not directly comparable with the data used by CIC to administer the immigration program.

The census is a cross-section of the Canadian population. In Canada, the most recent was census was on May 16, 2006. All households in Canada were ostensibly included. Every fifth household received the 2B form (long form) which contained questions on immigration status. The form stipulates that persons in Canada temporarily to work, attend an educational institution or as refugee claimants are to be included in the census. Non-permanent residents are identified in census data by a process of elimination. They are those Canadian residents who were born abroad, who have never been landed or granted permanent resident status and are not Canadian citizens. The 2B form is a rich source of social, demographic and economic information on individuals and their circumstances. It contains information not only on the occupation, but also on for example, the earnings, hours of work, place of work and language of work for each person enumerated.

CIC's visitor information system contains a record of every permit issued allowing a person to temporarily reside, work or study in Canada. Among the information in the system are the reasons for granting permits and their validity period. The system also contains information about the

precise occupation or place of employment for those who hold restricted or closed work permits. Some persons hold overlapping permits, for instance, one entitling them to work and another entitling them to go to school. However, it is possible to classify persons according to their **main** permit or reason for being in Canada and obtain a count of persons who have the right to reside in the country on a given day. It is not usually possible, however, to know if a permit holder with the right to reside in Canada actually resides in the country. In order to avoid some of the administrative burden associated with renewals, CIC grants permits for longer rather than shorter periods, subject to eligibility. Many persons no doubt leave Canada before their permit has expired, for example, at the end of their academic year or job.

Discrepancies between the number of non-permanent residents enumerated in the census and the number who held valid permits on Census Day according to CIC data, can be explained in a number of ways. As mentioned, some persons with the right to reside in Canada may not actually live in the country. Many non-permanent residents may not understand that they should complete a census form because they do not perceive that Canada is their usual place of residence. In addition, those residing in work camps may not receive forms or be visited by enumerators. Others may mistakenly identify themselves as immigrants.

Some of the differences in census data with respect to the persons covered by CIC programs can be anticipated. One is a seasonal bias. The census reflects a given day in May while non-permanent residents enter and leave Canada over the entire year. The census likely undercounts agricultural workers who come chiefly from Mexico and the Caribbean at harvest time. It likely also undercounts the number of students and professors who may leave after the academic year. Some of the biases are unknown. The census nonetheless represents the only source of information about non-permanent residents on many socio-economic dimensions. For example, it contains information on actual as opposed to intended occupation as well as earnings. It also allows comparisons with Canadian-born and immigrant workers.

Summary

Non-permanent residents make up a small but growing share of Canada's workforce. They come from a wide variety of countries. Most are young and the majority, male. They come to Canada for a number of reasons, under a variety of programs and constitute a diverse group. Most settle in the census metropolitan areas of Ontario, Quebec and British Columbia. However, the number destined for Alberta has been growing faster than elsewhere in the country. They are more often located in less densely occupied areas than new permanent immigrants.

Non-permanent residents working in Canada can be found in both unskilled and highly skilled occupations. Women who are non-permanent residents and work full time are most often found in caregiving and domestic work. In 2006, most women in these occupations were from the Philippines. Non-permanent resident men, especially those from Mexico, Central America and the Caribbean, were more often employed in the agricultural industry.

On the other hand, temporary workers from high-GDP economies such as the United States and Europe were more likely to be working as university professors, postsecondary teaching and research assistants, computer programmers and senior managers.

In general, non-permanent resident workers earn less than Canadian-born workers and established immigrants. These differences can largely be explained by the combination of different occupations in which non-permanent residents work as well as their countries of origin. International disparities in wealth and earnings are such that well-educated persons from low-GDP countries may find it to their advantage to accept unskilled temporary work in Canada. Additionally, some nonpermanent residents accept low-wage jobs as a means to gain Canadian work experience which can help them become permanent residents,

allowing them to benefit from access to the wider labour market.



Derrick Thomas is a senior analyst with Social and Aboriginal Statistics Division, Statistics Canada.

- 1. House of Commons Canada. (May 2009). Temporary Foreign Workers and Non-status Workers, Report of the Standing Committee on Citizenship and Immigration.
 - Choudry, A., Hanley J., Jordan, S., Shragge, E., and Stiegman, M. (2009). Fight Back, Workplace Justice for Immigrants. Fernwood.
 - The U.N. Convention on the Protection of Rights of Migrant Workers, which took effect in 2004, reflects concerns about the situation of workers outside their countries of citizenship/permanent residence.
- U.N. Committee on the Elimination of Discrimination Against Women, General Recommendation No. 26, on women migrant workers, December 5, 2008.
- 3. Earnings information is available for approximately 73,000 of them who also worked at a full-time job in 2005.
- 4. The precise program or type of visa under which non-resident foreign nationals remain and work in Canada cannot be determined from census data, Many individuals from other countries continue to study and make refugee claims here and many receive permission to work to allow them to support themselves or to pursue jobs related to their studies.
- Citizenship and Immigration Canada. Annual Report to Parliament on Immigration, 2008.
- 6. Under the Immigration Refugee Protection Act (IRPA) of 2002, some non-resident workers no longer require a permit. Conference speakers, entertainers and sports teams, for example, are no longer documented.
- 7. Citizenship and Immigration Canada. (2009). Facts and Figures: Immigration Overview, Permanent and Temporary Residents, 2008.
- 8. Citizenship and Immigration Canada. Annual Report to Parliament on Immigration, 2009.
- Citizenship and Immigration Canada. (2009) "Quarterly Administrative Data Release" http://www.cic.gc.ca/english/ resources/data-release/2009-Q3/index. asp. Accessed April 24, 2010.

- 10. Ruhs, M. and Philip M. (2008). "Numbers vs. rights: Trade-offs and guest worker programs." International Migration Review. Vol 42, no. 1.
 - Basok, T. (2007). "Canada's Temporary Migration Program: A model despite flaws." Migration Information Source. www.migrationinformation.org/issue nov07.cfm.
 - U.N. Department of Economic and Social Affairs. (2004). "Temporary migration and its relation to trade in services." Chapter V. World Economic and Social Survey 2004.
- 11. Department of Homeland Security. (2006). Yearbook of Immigration Statistics, 2006.
- 12. Hugo, G. (2004). "Temporary migration: A new paradigm of international migration." Research Note No. 55. Parliamentary Library, Department of Parliamentary Services, Commonwealth of Australia.
- 13. Abella, M. (2006). Policies and Best Practices for Management of Temporary Migration. Population Division, Department of Economic and Social Affairs, United Nations Secretariat.
- 14. Chaloff, J. and Lemaitre, G. (2009). Managing Highly Skilled Migration: A Comparative Analysis of Migration Policies and Challenges in OECD countries. OECD Social, Employment and Migration Working Papers No. 79.
 - Martin, P. (2005). Managing Labour Migration: Professionals, Guest Workers and Recruiters. Population Division, Department of Economic and Social Affairs, United Nations Secretariat. United Nations Expert Group Meeting on International Migration and Development.
- 15. Abella; Hugo; Basok.
- 16. World Bank. (2005). Global Economic Prospects 2006: International Implications of Remittances and Migration.
- 17. Muia, F. (2006). Employer Perspectives on International Labour Migration and Development, International Organization of Employers. www.ioe-emp.org.
- 18. Agunias, D. R. (2006). From A Zero-Sum to a Win-Win Scenario? Literature Review on Circular Migration. Migration Policy Institute.
- 19. Global Commission on International Migration. (2005). Migration in an Interconnected World: New Directions for Action. Report of the Global Commission on International Migration. http://www.gcim.org/attachements/gcimcomplete-report-2005.pdf.
- 20. Citizenship and Immigration Canada. How to Hire a Temporary Foreign Worker: A Guidebook for Employers. www.cic.gc.ca/ English/resources/publications/tfw-guide. asp

- 21. The list can be found in Citizenship and Immigration Canada's Foreign Worker Manual (FW1 5.26.). www.cic.gc.ca/english/resources/manuals/fw/fw01-eng.pdf
- 22. Citizenship and Immigration Canada. (2009). Facts and Figures, 2008. www.cic.gc.ca/english/resources/statistics/facts2008/index.asp
- 23. Citizenship and Immigration Canada. Temporary Foreign Workers —Your Rights and the Law. www.cic.gc.ca/english/resources/work/tfw-rights.asp.
- 24. CIA World Factbook. (2008).

- 25. It is possible to identify as a member of more than one population group. The figures are for those who mentioned the group as one of those to which they belonged.
- 26. The census is conducted in May. Very few crops in Canada are harvested at that time. A census conducted later in the growing season might identify more temporary agricultural workers.
- 27. Citizenship and Immigration Canada.

 Canada Welcomes Newcomers:

 The Canadian Experience Class.

 www.cic.gc.ca/english/resources/
 publications/cec.asp.

- 28. Earnings in the census are collected for the previous calendar year.
- 29. The census asks about earnings over the previous calendar year. The 2006 Census asked about earnings in 2005. Only full-time workers who had also worked mostly full time for at least one week in 2005 could be included. See the box What You Should Know About this Study.
- 30. The temporary residents captured in the 1991 Census were somewhat atypical given the large refugee movement and backlog clearance program at the time.
- 31. Citizenship and Immigration Canada. (2008). Foreign Worker Manual. P. 84.

The Daily Routine



Statistics Canada official release bulletin, every working day at 8:30 a.m. (Eastern time)



This morning, like every morning, you:



Is that right? You didn't read *The Daily?* Did you know that it's the best source of statistical information in the country?

The Daily provides economic and social data that's available free of charge on our Web site. Journalists never miss it. Business leaders and policy makers use it to make sound decisions.

All new data from Statistics Canada must be officially announced in *The Daily*. So if you read it every day, you don't miss a thing!

The Daily delivers news directly from Statistics Canada—with easy-to-read news releases, informative tables and simple charts that clearly illustrate the news.



Subscribe to The Daily. It's FREE.

Visit www.statcan.gc.ca to read
The Daily when you need it.
Or subscribe to the free online
delivery service and receive
The Daily automatically
by e-mail.

Add it to your dayto-day activities!

Participation in sports and cultural activities among Aboriginal children and youth

by Kristina Smith, Leanne Findlay and Susan Crompton

Introduction

Recent studies show that participating in extracurricular activities can have many benefits for children, including positive academic achievement, improved psychological functioning, and good peer relationships. Some research suggests that these activities have a positive effect because they provide children with opportunities to explore their identity, develop initiative, learn to control their emotions, and acquire social skills.

Although less is known about Aboriginal children's participation in extracurricular activities than is known about non-Aboriginal children, previous research has shown that Aboriginal children benefit from engaging in activities outside regular school hours. For instance, Aboriginal children living off-reserve are more likely to do well in school if they volunteer, take part in sports, cultural activities, clubs and groups, and art or music, or spend time with Elders.⁶ Physical exercise is also known to be associated with positive outcomes for Aboriginal children, including increased selfesteem⁷ and decreased rates of smoking.8 Conversely, lack of exercise is linked to higher rates of chronic conditions related to obesity such as diabetes, hypertension and arthritis,⁹ findings that are particularly relevant for Aboriginal children who are at two to three times higher risk for obesity than the Canadian average.¹⁰

Other research is also emerging that confirms the role of cultural identity in supporting Aboriginal health in general, 11,12 and there is mounting evidence about the positive impact of cultural activity on children's health. 13 Cultural identity is considered a key element of support and healing in the Aboriginal tradition, 14 and recent studies have suggested that it lowers youth suicide rates¹⁵ and contributes to improved academic achievement. 16 Some research has found that participation in cultural activities reduces depression and lowers substance and alcohol abuse. 17

This article draws on the children and youth section of the 2006 Aboriginal Peoples Survey (APS) to explore participation in sports and cultural activities by Inuit, Métis and off-reserve First Nations¹⁸ children aged 6 to 14 (for more on definitions and concepts see "What you should know about this study"). This study examines factors that may be associated with participation in extracurricular activities, including

the child's basic characteristics, cultural factors and time devoted to other extracurricular activities, as well as the family's sociodemographic characteristics.

The majority of Inuit, Métis and off-reserve First Nations children aged 6 to 14 take part in sports

A little more than two-thirds (69%) of Aboriginal children participated in sports at least once a week: 66% of First Nations children living offreserve, 71% of Métis and 72% of Inuit children. Boys were significantly more likely to take part than girls, regardless of their Aboriginal identity. Overall, children aged 9 to 11 tended to participate more than younger children, but among Inuit children, 12to 14-year-olds were proportionally more active than 6- to 8-year-olds. Children were also more likely to play sports at least once a week if they were in very good or excellent health (as reported by a parent) than if their health was less robust (Table 1).

The results of a logistic regression model show that the above-mentioned characteristics remain significantly associated with weekly sports participation, even after accounting for other factors such

What you should know about this study

Data from the Aboriginal Peoples Survey (APS) children and youth component were used to examine participation in sports and in cultural activities for Inuit, Métis and First Nations children between the ages of 6 and 14 and living off-reserve. Conducted by Statistics Canada in 2006, the Aboriginal Peoples Survey collected information on the social and economic conditions of Aboriginal people in Canada. Included were persons with Aboriginal ancestors and/or who identified with one of the Aboriginal groups (North American Indian, Métis, Inuit), and/or had treaty or registered Indian status, and/or had Indian Band membership. Individuals living on reserves in the provinces were not included in the survey; in the territories, all Inuit, Métis and First Nations children were included in the survey. Only individuals aged 6 to 14 who were reported as having single North American Indian, Métis or Inuit identity were included in the study population, producing a sample of 11,940 respondents representing just under 170,000 Aboriginal children. (For more information about the APS survey sample and design, see Aboriginal Peoples Survey, 2006: Concepts and Methods Guide. Statistics Canada Catalogue no. 89-637-XWE2008003).

Definitions

Sports participation: Children played sports (including taking lessons) at least once a week, as reported by the parent. Less frequent involvement was classified as nonparticipation.

Participation in cultural activities: Children took part in culturally related activities regardless of frequency, as reported by the parent. Because these activities may be infrequent, e.g., learning a dance for a ceremony that occurs once a year, it was felt that requiring once a week or even monthly participation would be too strict a condition for inclusion.

Contact with Elders: Children spent time at least once a week with Elders.

Knowledge of an Aboriginal language: Parents were asked: "Does the child speak an Aboriginal language?" If the answer was "yes," children were considered to speak and understand an Aboriginal language. If the answer was "no," the parent was then asked: "Does the child understand an Aboriginal language even if or' a few words?" If this answer was "yes." children were classified as understanding (but not speaking) an Aboriginal language. Children whose parents replied "no" to both these questions were classified as not knowing an Aboriginal language.

'Screen time' per day: The estimated average amount of time per day spent by children watching television, videos or DVDs, on a computer, or playing video games was approximately four hours. Based on this average, children were split into two groups reporting below- and above-average time devoted to these activities.

Other extracurricular activities: Parents were asked if their child participated in art or music groups or lessons; in clubs or groups such as dance, youth or drum groups; or helped out without pay (volunteered) in the community or at school. Children were defined as participants if they took part at least once a week in one or more of these activities. Place of residence: The APS allows the aggregation of census subdivisions based on metropolitan areas. In this study, four levels of geography were delineated: census metropolitan areas (CMA), census agglomerations (CA), census metropolitan area and census agglomeration influenced zones (MIZ), and Inuit Nunangat. A MIZ comprises census subdivisions (municipalities) that lie outside CMAs and CAs, but are economically influenced by them (as measured by commuting flows). Depending on the strength of the urban tie, the influence of the closest CMA/CA can range from strong to no influence. Inuit Nunangat is the Inuit homeland and includes communities in Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region (Northwest Territories).

The model

In order to isolate individual factors having an influence on participation in activities, a logistic regression model was developed for each of the extracurricular activities examined here. These models allowed for the estimation of odds that a child with a given characteristic was a participant compared to a non-participant in an activity, while removing the effect of other confounding factors. Survey sampling weights were applied to account for the complex survey design and to render the analyses representative of the Aboriginal population in Canada (excluding reserves). A bootstrapping technique was utilized to produce all variance estimates, and significance was accepted at the p < 0.05 level (see Table 2 for a complete list of characteristics included in the models).

What you should know about this study (continued)

Data limitations

Information about the child's participation relied on parental reporting and was based on a single question. The response might also be influenced by the parent's perception of what constitutes a sport or cultural activity. In addition, the survey was conducted in the winter, which might produce lower estimates of sports participation than in the summer months.

Finally, terms like "extracurricular activity," "sports" and "clubs" may reflect Westernized attitudes or philosophies of time use¹ and thus should be interpreted with some caution.

 One potential limitation of previous research on extracurricular activities may have been an over-reliance on Westernoriented approaches to leisure pursuits. Iwasaki, Yoshitaka, Judith G. Bartlett, Benjamin Gottlieb and Darlene Hall. 2009. Leisure-like pursuits as an expression of Aboriginal cultural strengths and living actions. Leisure Sciences. Vol. 31, issue 2. p. 158-173.

as family characteristics, cultural identification and involvement in other extracurricular activities. The influence of gender was particularly strong: the odds of weekly sports participation were almost 80% higher for Aboriginal boys than girls (Table 2).

Some family characteristics were also associated with a child's weekly participation in sports, confirming the results of an earlier study using the 2001 APS. 19 In 2006, Inuit, Métis and off-reserve First Nations children with two parents in the home were more likely to engage in sports, at 72% compared to 63% for children with one parent. This gap was significant for First Nations and Métis children but not for Inuit children. Overall, children with parents who responded to the survey and had completed high school, college or university also displayed higher rates of weekly sports involvement than those with parents without secondary education. Similarly, children living in households with income over \$30,000 a year were more likely to play sports; furthermore, the higher their family's income, the greater their likelihood of participating.

Even after other factors were controlled for, children living in households with incomes above \$50,000 and living, with parents who had completed high school, college or university, remained positively associated with frequent sports

participation. The relationship with parental education was especially strong. Compared to children whose parent had not finished high school, the odds of participating were almost 25% higher for children of high school graduates and almost 75% higher for children of university graduates.

Overall, children with more than three siblings were less likely to play sports at least once a week than those with fewer than two siblings. However, once other variables in the model were controlled for, this characteristic was no longer significantly associated with sports participation. And although a recent study of Canadian children shows that sports participation differs by urban density, ²⁰ this was not the case for Aboriginal children.

Children who are busy with other extracurricular activities are more likely to take part in sports

Watching TV, using a computer and/ or playing video games consumes a lot of children's daily leisure time. Overall, Aboriginal children who spent less than four hours on these activities were more likely to participate in sports at least once a week than those who devoted more time to them (Table 1). Children who took part in cultural activities, participated in music or art lessons or groups, did volunteer work or belonged to a club also had a greater tendency to participate in sports. After controlling for other characteristics, these leisure-time activities remained significantly associated with sports involvement, with engagement in other weekly activities showing the strongest effect (odds of almost 2.3 to 1.0) (Table 2).

Finally, the effect of certain cultural factors on sports participation was not large, even after controlling for other factors. Aboriginal children who regularly spent time with Elders (at least once a week) had 20% higher odds of sports participation than those who had less contact. On the other hand, knowledge of an Aboriginal language was not significantly associated with the likelihood of a child participating in weekly sports activities.

Four in ten Aboriginal children participate in cultural activities

Sports are the most popular type of extracurricular activity among Inuit, Métis and off-reserve First Nations children, compared to other out-of-school activities. However, cultural activities also accounted for an important part of their lives, with four in ten children taking part in such activities.

Recent research has found that many Aboriginal adults feel cultural activities like dancing and creating art are strongly associated with positive emotions, identity and aspirations.²¹ Many Aboriginal children live in

Table 1 Aboriginal children aged 6 to 14 participating in sports and cultural activities by selected characteristics, 2006

Page		Children who participated in							
Total number of children 170		Sports at least once a week				Cultural activities			
Total number of children in thousands 170 91 68 11 168 91 67		Total		Métis	Invit	Total		Métis	Invi
Name 170 91 68 11 168 91 67 68 11 168 91 67 67 67 67 67 67 67 6					nur	nber			
Common C		170	01	40	11	140	0.1	47	10
Child's characteristics Sex	thousands	1/0	91	00			71	0/	- 10
Sex					perce	entage			
Total 69 66 71 72 40 43 33 61 61 61 67 65 41 44 36 61 61 67 65 41 44 36 61 61 67 65 41 44 36 61 61 67 65 41 30 43 33 61 61 61 67 65 41 41 42 36 71 72 71 73 73 78 78 38 41 30 78 78 78 78 78 78 78 78 78 78 78 78 78									
Girl ↑ 65 61 69 65 41 44 36 Boy 72° 71° 73° 78° 38 41 30° Age group 6 to 8 years ↑ 66 64 69 66 38 42 30 9 to 11 years 72° 70° 76° 73 40 42 34 12 to 14 years 67 65 68 78° 41 43 35 Edif-rated health status Scelf-rated health status Scel		69	66	71	72	40	43	33	56
Boy 72* 71* 73* 78* 38 41 30* Age group 6 66 64 69 66 38 42 30 9 to 11 years 72* 70* 76* 73 40 42 34 12 to 14 years 67 65 68 78* 41 43 35 Self-rated health status Good, fuir or poor † 58 55 60 67 39 40 34 Very good 66* 63* 68* 80* 41 44 33 Excellent 73* 72* 75* 71 39 43 32 Excellent 73* 72* 70* 73* 72 39 40 34 Training household One † 63 60 6 76 40 43 34 Two 71 69* 74 73 36 40 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>55</td>									55
Age group 6 6 64 69 66 38 42 30 9 to 11 years 72° 70° 76° 73 40 42 34 12 to 14 years 67 65 68 78° 41 43 35 Self-rated health status Good, fair or poor † 58 55 60 67 39 40 34 Very good 66° 63° 68° 80° 41 44 33 Excellent 73° 72° 75° 71 39 43 32 Temity characteristics Number of parents in household One † 63 60 66 76 40 43 34 Two 72° 70° 73° 72 39 42 33 Mumber of siblings in household 80 57 70° 73° 72 39 42 33 Four or three 68 65 <td>· ·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>57</td>	· ·								57
6 To 8 years † 66 64 69 66 38 42 30 9 to 11 years 72° 70° 76° 73 40 42 34 12 to 14 years 67 65 68 78° 41 43 35 Self-rated health status Good, fair or poor † 58 55 60 67 39 40 34 Very good 66° 63° 68° 80° 41 44 33 Self-rated health status Fixeellent 73° 72° 75° 71 39 43 32 Fixeellent 72° 70° 73° 72° 39 42 33 Number of parents in household One † 63 60 66 76 40 43 34 Two 72° 70° 73° 72° 39 42 33 Number of siblings in household None or one † 71 69 74 73 36 40 32 Fixeellent 65° 65° 61° 76° 48° 49° 38 Education of trespondent parent Less than high school † 60 57 60 71 39 40 30 Some postsecondary 68° 66° 72° 77° 37° 40 30 Some postsecondary 68° 66° 70° 69 41 44 35 College diploma 74° 73° 74° 84° 74° 78 39 44 33 University degree 79° 76° 84° 74° 78 39 44 33 University degree 79° 76° 84° 74° 78 39 44 33 University degree 79° 76° 84° 77° 79° 73 39 43 33 Somo postsecondary 66° 65° 64 67° 69 39 42 31 Solo,000 to \$49,999 65° 64 67° 69 39 42 31 Solo,000 to \$79,999 71° 69° 73° 76° 39 43 33 Solo,000 to \$79,999 71° 69° 73° 76° 39 43 33 Solo,000 to \$79,999 71° 69° 77° 79° 73 39 43 32 Flace of residence MIZI ↑ 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37° 41 41 45 36 Census metropolitan area 68 66° 71 74 41 39 43 32 Inuit Nunangar 71 F F F 71 61° F F Cultural factors Knowledge of Abortiginal language Speaks and understands 68 66° 71 71 63° 65° 59° 50° 50° 50° 50° 50° 50° 50° 50° 50° 50	·	1 2	/ 1	7.5	70	30	71	30	31
9 to 11 years		66	64	69	66	38	42	30	52
12 to 14 years 67 65 68 78° 41 43 35 Self-rated health status Self-carded health status Very good 66° 63° 68° 80° 41 44 33 Excellent 73° 72° 75° 71 39 43 32 Tamily characteristics Number of parents in household One ↑ 63 60 66 76 40 43 34 Two 72° 70° 73° 72 39 42 33 Number of siblings in household None or one ↑ 71 69 74 73 36 40 32 Two or three 68 65 71 69 39 42 33 Four or more 65° 65° 65 61° 76 48° 49° 38 Education of respondent parent Eass than high school † 60 57 60 71 39 40 30 High school diploma 69° 65° 72° 77 37° 37° 40 30 Some postsecondary 68° 66° 70° 69 41 44 35 College diploma 74° 73° 74° 78 39 44 33 College diploma 74° 73° 74° 78 39 44 33 College diploma 74° 73° 74° 78 39 44 33 College diploma 74° 73° 74° 78 39 44 33 College diploma 74° 73° 74° 78 39 44 33 Some postsecondary 68° 66° 70° 69 41 44 36° Some postsecondary 60° 58 61° 70° 69 41 44 36° Some postsecondary 60° 58 61° 70° 69 41 44 36° Some postsecondary 60° 70° 70° 70° 70° 70° 70° 70° 70° 70° 7									59
Self-rared health status Self-rared health s	·								58
Good, fair or poor † 58 55 60 67 39 40 34 Very good 66° 63° 68° 80° 41 44 33 Excellent 73° 72° 75° 71 39 43 32 Excellent 75° 70° 73° 72° 39 42 33 Number of parents in household One † 63 60 66 76 40 43 34 Two 72° 70° 73° 72° 39 42 33 Number of siblings in household None or one † 71 69 74 73 36 40 32 Two or three 68 65 71 69 39 42 33 Four or more 65° 65 61° 76 48° 49° 38 Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69° 65° 72° 77 37 40 30 Some postsecondary 68° 66° 70° 69 41 44 35 College diploma 74° 73° 74° 78 39 44 33 University degree 79° 76° 84° 74° 78 39 44 33 University degree 79° 76° 84° 74° 78 39 44 33 University degree 79° 76° 84° 74° 78 39 42 31 S50,000 to S49,999 65° 64 67 69 39 42 31 S50,000 to S49,999 71° 69° 73° 76° 39 42 31 S50,000 to S79,999 71° 69° 73° 76° 39 42 31 S50,000 to S79,999 71° 69° 73° 76° 39 43 32 Place of residence MIZ¹² † 70 69° 71 74 41 45 36 Census angolomeration 68 66° 71 74° 39 43 32 Inuit Nunangat 71 F F F 71 61° F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68° 66° 71 71° 63° 65° 59°		07	0.0	00	70	41	40	3.3	30
Very good		5.0	55	60	47	30	40	3.4	57
Excellent 73° 72° 75° 71 39 43 32									57
Family characteristics Number of parents in household One † 63 60 66 76 40 43 34 Two 72* 70* 73* 72 39 42 33 Number of siblings in household None or one † 71 69 74 73 36 40 32 Two or three 68 65 71 69 39 42 33 Four or more 65 65 65 61* 76 48* 49* 38 Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69* 65* 72* 77 37 40 30 Some postsecondary 68* 66* 70* 69 41 44 35 College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 32 Place of residence MIZ ¹² † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Cultural factors Knowledge of Aboriginal language Specks and understands 68 66 67 71 63* 65* 59*									55
Number of parents in household One † 63 60 66 76 40 43 34 Two 72 70 73 72 39 42 33 Number of siblings in household Number of siblings in household None or one † 71 69 74 73 36 40 32 Two or three 68 65 71 69 39 42 33 Four or more 65 65 65 61 76 48 49 38 Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69 65 72 72 77 37 40 30 Some postsecondary 68 66 70 72 77 37 40 30 Some postsecondary 68 66 70 74 78 39 44 35 College diploma 74 73 74 78 39 44 33 University degree 79 76 84 74 46 48 48 44 48 44 48 49 49 31 University degree 79 76 84 74 78 39 44 33 University degree 79 76 84 77 78 39 42 31 35 50,000 to \$49,999 65 64 67 69 39 42 31 35 550,000 to \$49,999 71 69 73 76 39 43 32 28 100 to \$49,999 71 69 71 74 41 45 36 25 28 10 37 41 31 32 28 100 to \$40,999 71 70 69 71 74 41 45 36 25 28 10 37 41 31 31 20 28 100 to \$40,999 71 70 69 71 74 41 45 36 25 28 10 37 41 31 31 20 28 100 to \$40,999 71 71 74 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75		/3	12	/3	/ 1	37	43	32	20
One † 63 60 66 76 40 43 34 Two 72* 70* 73* 72 39 42 33 Number of siblings in household None or one † 71 69 74 73 36 40 32 Two or three 68 65 71 69 39 42 33 Four or more 65* 65 61* 76 48* 49* 38 Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69* 65* 72* 77 37 40 30 Some postsecondary 68* 66* 70* 69 41 44 35 College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46*		4							
Two			60	66	76	40	43	34	56
Number of siblings in household 71									57
None or one			70	7.0	7 2	0,	12	00	3,
Two or three 68 65 71 69 39 42 33 Four or more 65* 65 61* 76 48* 49* 38 Education of respondent parent Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69* 65* 72* 77 37 40 30 Some postsecondary 68* 66* 70* 69 41 44 35 College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* <			69	7.4	73	36	40	32	45
Four or more 65° 65 61° 76 48° 49° 38 Education of respondent parent	·								56
Education of respondent parent Less than high school † 60 57 60 71 39 40 30 High school diploma 69° 65° 72° 77 37 40 30 Some postsecondary 68° 66° 70° 69 41 44 35 College diploma 74° 73° 74° 78 39 44 33 University degree 79° 76° 84° 74 46° 48° 44° Household income 4 46° 84° 74 46° 48° 44° Household income 4 46° 84° 74 46° 48° 44° Household income 4 46° 67 69 39 42 31 \$30,000 to \$49,999 65° 64 67 69 39 43 32 \$80,000 or more 78° 77° 79° 73 39 43 32 <									65
Less than high school † 60 57 60 71 39 40 30 High school diploma 69* 65* 72* 77 37 40 30 Some postsecondary 68* 66* 70* 69 41 44 35 College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 </td <td></td> <td></td> <td>0.5</td> <td>01</td> <td>70</td> <td>10</td> <td>17</td> <td>00</td> <td>0,5</td>			0.5	01	70	10	17	00	0,5
High school diploma 69° 65° 72° 77 37 40 30 Some postsecondary 68° 66° 70° 69 41 44 35 College diploma 74° 73° 74° 78 39 44 33 University degree 79° 76° 84° 74 46° 48° 44° Household income Less than \$30,000† 60 58 61 70 41 44 36 \$30,000 to \$49,999 65° 64 67 69 39 42 31 \$50,000 to \$79,999 71° 69° 73° 76° 39 43 33 \$80,000 or more 78° 77° 79° 73 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37° 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F F 71 61° F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63° 65° 59°			57	60	71	39	40	30	57
Some postsecondary 68* 66* 70* 69 41 44 35 College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F 71 61*									63
College diploma 74* 73* 74* 78 39 44 33 University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 33 \$80,000 or more 78* 77* 79* 73 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*									54
University degree 79* 76* 84* 74 46* 48* 44* Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 33 \$80,000 or more 78* 77* 79* 73 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*									55
Household income Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 33 \$80,000 or more 78* 77* 79* 73 39 43 32 Place of residence									F
Less than \$30,000 † 60 58 61 70 41 44 36 \$30,000 to \$49,999 65* 64 67 69 39 42 31 \$50,000 to \$79,999 71* 69* 73* 76 39 43 32 Place of residence MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*		/ 7	70	04	/ 4	40	40	44	
\$30,000 to \$49,999		60	58	61	70	41	ΔΔ	36	49
\$50,000 to \$79,999	330 000 to \$49 999								60
\$80,000 or more	550 000 to \$47,777								55
MIZ ^{1,2} †									58
MIZ ^{1,2} † 70 69 71 74 41 45 36 Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*		/ 0	//	19	/3	37	43	32	38
Census metropolitan area 68 65 72 81 37* 41 31 Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*		70	40	71	7.1	41	15	3,6	37
Census agglomeration 68 66 71 74 39 43 32 Inuit Nunangat 71 F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*	· · · · · · · · · · · · · · · · · · ·								42
Inuit Nunangat 71 F F 71 61* F F Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*									35
Cultural factors Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*									35 61
Knowledge of Aboriginal language Speaks and understands 68 66 67 71 63* 65* 59*		/ 1	T	r	/	01	ľ	r	61
Speaks and understands 68 66 67 71 63* 65* 59*	Knowledge of Aboriainal langu	aae							
			66	67	71	63*	65*	59*	61
70 70 70 71									54
Neither † 70 68 72 72 27 28 27									33

Table 1 Aboriginal children aged 6 to 14 participating in sports and cultural activities by selected characteristics, 2006 (continued)

	Children who participated in							
	S	ports at least	once a week			Cultural	activities	
	Total	First Nations	Métis	Invit	Total	First Nations	Métis	Invit
				perce	entage			
Contact with Elders								
Less than once a week †	66	64	69	70	33	35	27	51
At least once a week	72*	71*	74	75	50*	54*	42*	63*
Other extracurricular activities Screen time per day								
Less than four hours †	73	70	76	72	40	44	34	57
Four or more hours	65*	63*	66*	73	39	41	32	54
Sports								
At least once a week					42*	37	35*	61*
Less than weekly †		***	***		34	46*	28	44
Cultural activities								
Participant	73*	71*	75*	78*		***	•••	
No cultural activities †	66	63	69	65			***	***
Other activities ³								
Weekly	76*	75*	77*	81*	46*	50*	40*	62*
No/few other activities †	57	53	61	61	29	31	22	45

[†] reference group

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

families or communities where a holistic approach to child development is taken, emphasizing the role of cultural participation on children's health.²²

In 2006, more than one-half (56%) of Inuit children engaged in cultural activities, as did 43% of First Nations children living off-reserve and 33% of Métis children. Generally speaking, boys were just as likely as girls to participate in cultural activities, 9- to 11-year-old tweens and 12- to 14-year-old teens had the same rates of participation as younger children, and children in good-to-poor health were just as likely to take part as those in excellent health.

In contrast, some family characteristics played a role in a child's involvement in cultural activities. Overall, children with more than three brothers and sisters had a higher participation rate—the gap was especially large for Inuit children at 65%, versus 45% for those with only one or no siblings. Even after other variables in the model were taken into account, children with four or more siblings had almost 30% higher odds of participating than those with fewer than two siblings.

Aboriginal children with a parent who had graduated from university were also more likely to participate in cultural activities than if the parent had less than a high school education, at 46% versus 39%. This factor was still highly significant after controlling for other variables. Compared with children of a parent without high school, the odds of involvement in cultural activities were about 25% higher for children of high school graduates and over 100% higher for children of university graduates.

None of the other family characteristics in the model were significantly associated with children's participation in cultural activities.

^{*} statistically significant difference from reference group in that population at p < 0.05, for example, a significantly higher percentage of all single-identity Aboriginal boys participated in sports weekly compared to all single-identity Aboriginal girls. Similarly, proportionally more Métis boys participated in sports than Métis girls.

^{1.} Census metropolitan area and census agglomeration influenced zone.

^{2.} Excludes any metropolitan influenced zone inside Inuit Nunangat.

^{3.} Includes participating in art or music groups or lessons; in clubs or groups, such as youth groups, drum groups, or dance groups; and helping without pay in the community or at school.

Table 2 Odds ratios for Aboriginal children aged 6 to 14 participating in sports and cultural activities by selected characteristics, 2006

	Odds that c participate			Odds that c participate	
	Sports at least once a week	Cultural activities		Sports at least once a week	Cultural activities
	odds ra	tios		odds ra	tios
Child's characteristics			Place of residence		
Sex			MIZ ^{1,2} †	1.00	1.00
Boy	1.76*	0.98	Census metropolitan area/census		
Girl †	1.00	1.00	agglomeration	0.94	0.94
Age group			Invit Nunangat	0.89	1.30
6 to 8 years †	1.00	1.00	Cultural factors		
9 to 11 years	1.30*	0.98	Aboriginal identity (single ori		
12 to 14 years	1 02	1.04	First Nations	0.91	1.18*
Self-rated health status			Métis †	1.00	1.00
Good, fair or poor †	1.00	1.00	Inuit	1.34	0.96
Very good	1.38*	1.05	Knowledge of Aboriginal lang	vage	
Excellent	1.81*	1.00	Speaks and understands	0.98	4.18*
Family characteristics			Understands	0.91	2.77*
Number of parents in hous	sehold		Neither †	1.00	1.00
One †	1.00	1.00	Contact with Elders		
Two	1.13	0.97	Less than once a week †	1.00	1.00
Number of siblings in hous	sehold		At least once a week	1.21*	1.76*
None or one †	1.00	1.00	Other extracurricular activities		
Two or three	0.94	1.08	Screen time per day		
Four or more	0.88	1.28*	Less than four hours †	1.00	1.00
Education of respondent p			Four or more hours	0.75*	0.92
Less than high school †	1.00	1.00	Sports		
High school diploma	1.24*	1.24*	At least once a week		1.22*
Some postsecondary	1.17	1.45*	Less than weekly †		1.00
College diploma	1.44*	1.42*	Cultural activities		
University degree	1.73*	2.08*	Participant	1.21*	
Household income	1.70	2.00	No cultural activities †	1.00	***
Less than \$30,000 †	1.00	1 00	Other activities ³		
\$30,000 to \$49,999	1.16	0.95	Weekly	2.26*	1.99*
\$50,000 to \$79,999	1.32*	0.73	No/few other activities †	1.00	1.00
\$80,000 or more	1.72*	0.98			

reference group

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

statistically significant difference from reference group at p $\,<\,0.05$

^{1.} Census metropolitan area and census agglomeration influenced zone.

^{2.} Excludes any metropolitan influenced zone inside Inuit Nunangat.

^{3.} Includes participating in art or music groups or lessons; in clubs or groups such as youth groups, drum groups, or dance groups; and helping without pay in the community or at school.

Using an Aboriginal language and spending time with Elders key indicators of participation in cultural activities

As one would expect, children who spoke an Aboriginal language or spent time with Elders were more likely to participate in cultural activities outside regular school hours. Almost two-thirds (63%) of children who spoke an Aboriginal language took part in cultural activities; even those who understood but did not speak an Aboriginal language were about twice as likely to participate as children with no knowledge (51% versus 27%). These proportions were similar for all three Aboriginal groups (Table 1). After all other variables were taken into account, Aboriginal language speakers were found to have over four times higher odds than children with no Aboriginal language knowledge of being involved in culturally related activities, while children who understood but did not speak had more than two and one-half times higher odds (Table 2).

Spending time with Elders is also associated with participation in cultural activities. One-half (50%) of children who spent time with Elders at least once a week took part in cultural activities, compared with one-third (33%) of those who did not. After controlling for other factors in the model, children with weekly interaction with Elders had 76% higher odds of cultural engagement than those with less frequent contact.

Overall, children who also took part in additional extracurricular activities had much higher rates of participation in cultural activities. More than four in ten (42%) children involved in sports were also engaged in cultural activities, as were almost one-half (46%) of children who had other weekly pastimes such as arts and music, clubs or groups, and volunteering. After controlling for other factors, both sports and other activities remained

significantly associated with cultural participation—the odds of being engaged in cultural activities were about 20% higher for children involved in sports, and almost 100% higher for children involved in other activities. This large difference in the strength of association may be due to the nature of "other activities" as defined in the survey, many of which (e.g., music, art, clubs) may be culturally related.²³

Summary

According to the 2006 Aboriginal Peoples Survey, over two-thirds of Inuit, Métis and off-reserve First Nations children participated in sports at least once a week and about four in ten participated in cultural activities. While causal attributions cannot be made, regression models that controlled for the confounding effects of different factors identified three significant associations common to participation in both sports and cultural activities. These common factors were a higher level of parental education, weekly contact with Elders, and involvement in additional extracurricular activities.

Other characteristics associated with sports participation included being a boy, being between 9 and 11 years of age, having very good to excellent health, living in a higher-income family, and spending less than four hours per day watching TV or playing computer and video games.

The other characteristics strongly associated with participation in cultural activities were quite different. Having four or more siblings and having knowledge of an Aboriginal language were important factors influencing children's involvement in cultural activities.

GST

Kristina Smith is a technical officer, **Leanne Findlay** is an analyst with the Health Analysis Division and **Susan Crompton** is a senior analyst with the Social and Aboriginal Statistics Division.

- Darling, Nancy. 2005. "Participation in extracurricular activities and adolescent adjustment: Cross-sectional and longitudinal findings." Journal of Youth and Adolescence. Vol. 34, no. 5. p. 493-505.
- Feldman, Amy F. and Jennifer Matjasko. 2007. "Profiles and portfolios of adolescent school-based extracurricular activity participation." Journal of Adolescence. Vol. 30. p. 313-332.
- Fredericks, Jennifer. A. and Jacquelynne S. Eccles. 2006. "Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations." Developmental Psychology. Vol. 42, no. 4. p. 698-713.
- 4. Dworkin, Jodi. B., Reed Larson and David Hansen. 2003. "Adolescents' accounts of growth experiences in youth activities."

 Journal of Youth and Adolescence. Vol. 32, no. 1. p. 17-26.
- Iwasaki, Yoshitaka, Judith G. Bartlett, Benjamin Gottlieb and Darlene Hall. 2009. "Leisure-like pursuits as an expression of Aboriginal cultural strengths and living actions." Leisure Sciences. Vol. 31, issue 2. p. 158-173.
- Turcotte, Martin and John Zhao. 2004. "Well-being of off-reserve Aboriginal children." Canadian Social Trends. No. 75. Winter. Statistics Canada Catalogue no. 11-008-X. p. 22-27.
- Kickett-Tucker, Cheryl S. 1999. School Sport Self-concept of Urban Aboriginal School Children: Teacher Influences.
- 8. Reading, Jeff. 2003. "A global model and national network for Aboriginal health research." Canadian Journal of Public Health. Vol. 94, no. 3. p. 185-189.
- Statistics Canada. 2008. "Obesity and the eating habits of the Aboriginal population." The Daily. January 23.
- Public Health Agency of Canada. 2010. Childhood Obesity and the Role of the Government of Canada. Ottawa.
- 11. Wilson, Kathleen and Mark W. Rosenberg. 2002. "Exploring the determinants of health for First Nations peoples in Canada: Can existing frameworks accommodate traditional activities?" Social Science & Medicine. Vol. 55, issue 11. p. 2017-2031.
- 12. Iwasaki, Yoshitaka and Judith G. Bartlett. 2006. "Culturally meaningful leisure as a way of coping with stress among Aboriginals with diabetes." Journal of Leisure Research. Vol. 38. p. 321-338.

- 13. Riecken, Ted, Michele T. Tanaka and Tish Scott. 2006. "First Nations youth reframing the focus: Cultural knowledge as a site for health education." The Canadian Journal of Native Education. Vol. 29. p. 29-44.
- 14. Poonwassie, Anne and Ann Charter. 2001. "An Aboriginal worldview of helping: Empowering approaches." Canadian Journal of Counselling, Vol. 35, no. 1. p. 63-73.
- 15. Chandler, Michael J. and Christopher E. Lalonde, 2008, "Cultural continuity as a protective factor against suicide in First Nations youth." Horizons. Vol. 10, no. 1. p. 68-72.
- 16. Baydala, Lola, Carmen Rasmussen, June Birch, Jody Sherman, Erik Wikman, Julianna Charchun, Merle Kennedy and Jeffrey Bisanz. 2009. "Self-beliefs and behavioural assessment scales as related to academic achievement in Canadian Aboriginal children." Canadian Journal of School Psychology. Vol. 24, no. 1. p. 19-33.

- 17. McIvor, Onowa, Art Napoleon and Kerissa M. Dickie. 2009. "Language and culture as protective factors for atrisk communities." Journal of Aboriginal Health. November. p. 6-25.
- 18. Children were identified as "North American Indian" in the survey; however, the term "First Nations" is used throughout this article.
- 19. Findlay, Leanne C. and Dafna E. Kohen. 2007. "Aboriginal children's sport participation in Canada." Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health. Vol. 5, no. 1. p. 185-206.
- 20. Clark, Warren. 2008. "Kids' sports." Canadian Social Trends. No. 85. Summer. Statistics Canada Catalogue no. 11-008-X. p. 54-61.
- 21. Anderson, Marcia, Janet Smylie, Ian Anderson, Raven Sinclair and Suzanne Crengle. 2006. First Nations, Métis, and Inuit Health Indicators in Canada: A Background Paper for the project "Action Oriented Indicators of Health and Healthy Systems Development for Indigenous Peoples in Australia, Canada, and New Zealand". Available at: http://www.iphrc.ca/Upload/canadian. pdf (accessed June 2, 2010).
- 22. Iwasaki et al. 2009.
- 23. Many leisure activities for First Nations and Métis adults often include spiritual and cultural activities such as dancing, creating art and attending sweat lodges. Iwasaki et al. 2009.

Emigration from Canada to the United States from 2000 to 2006

by Patrice Dion and Mireille Vézina

Introduction

The United States has long been a huge draw for Canadians. The geographical closeness, the economic opportunities, the relationship the two countries have built over the years and their common cultural features make it easy for thousands of Canadians, individually or with their families, to move south of the border each year.

With the exception of slight increases in the 1970s and 1990s, the number of Canadians living in the United States has gradually decreased since 1930, when it peaked at 1,310,000. The most recent increase in emigrants from Canada is attributable to the growing number of skilled Canadian workers who left Canada to work in the United States. Overall, however, this phenomenon, dubbed the 'brain drain,' remained small, both from a historic perspective as well as relative to the Canadian workforce.

Globally, migration exchanges between developed countries continues, however these exchanges have changed in nature. Today there is increasing talk about brain 'churn,' rather than brain drain. For example, while migration between the Organization for Economic Co-operation and Development (OECD) countries is on the rise, it is

characterized mainly by the temporary flow of researchers, students, managers and computer specialists.³

In this context, and since no recent studies have delved into this matter specifically, it is important to understand what migration exchanges have taken place from Canada to the United States. More specifically, has emigration increased, decreased or remained stable compared to the late 1990s? Additionally, what is the nature of this emigration? For example, does it still consist mainly of skilled and highly educated workers? The purpose of this article is to answer these questions and provide a more current depiction of Canadian emigration to the United States.

Canadian emigration is not subject to compulsory registration, as is the case for births, deaths (through vital statistics registries) and immigration (through Citizenship and Immigration Canada). Although some Canadian data sources provide an overview of the emigrant flow from Canada, they do not allow for an exhaustive review of emigration by country of destination. It is therefore often preferable to use data from the receiving countries.4 This is the approach chosen for the current study, which benefits mainly from data from the American Community Survey (ACS), conducted in the United States.

The number of emigrants from Canada decreased between 2000 and 2006

One of the advantages of the American Community Survey (ACS) is that it can be used to estimate the number of individuals residing in the United States and who lived in Canada one year earlier. In other words, the ACS estimates the number of individuals emigrating from Canada to the United States in the course of a year. The ACS data show that from 2000 to 2006, the annual number of individuals who left Canada to live in the United States on a temporary or permanent basis fell by approximately 35%, dropping from 113,100 in 2000 to 73,000 in 2006 (Chart 1). Specifically, it was early in this period, i.e., between 2000 and 2002, that the annual flows decreased, and then remained relatively stable from 2002 to 2006. The rate of emigration to the United States went from 3.7 per 1000 in 2000 to 1.9 per 1000 in 2002, and then settled at 2.2 per 1000 in 2006.

Among the three groups of emigrants to the United States from Canada (the Canadian born, those born originally in the United States, those born outside of Canada or the United States), the decrease in the number of emigrants between 2000 and 2002 was observed only among individuals born in the

What you should know about this study

The American Community Survey (ACS)

The American Community Survey (ACS) is an annual survey carried out by the U.S. Census Bureau. The purpose of the ACS is to replace the long questionnaire of the American census conducted every 10 years. Since it contains questions on the demographic and economic characteristics of the population as well as on the place of birth and migration of respondents, it provides a more comprehensive socioeconomic picture of immigrants from Canada (Canadian emigrants to the United States.)

The collection of ACS data is ongoing. The resulting estimates therefore correspond to aggregate data collected throughout the year. They represent, on the whole, the average characteristics of the population over the course of a year, and not to one specific date.

Although the ACS started in 2000, it only reached its full implementation starting in 2005, the year in which the sample was expanded to nearly three million households. The analyses in this study are, for the most part, based on Public Use Microdata Sample (PUMS) files. In 2006, the sample of the ACS PUMS file consisted of 2,969,741 people.

Note that more recent ACS files have been released since this study was conducted.

Concepts

Populations studied

Depending on the topics covered, two populations are looked at in this article, namely individuals making up the annual migratory flows from Canada to the United States and Canadian-born persons residing in the United States.

The first is defined in this study using ACS information on place of residence one year earlier. This population consists of those living in the United States at the time of the survey who reported that they resided in Canada one year earlier. However, there is nothing in the ACS to indicate the status these individuals in Canada before migrating—they might have been immigrants or non-permanent residents.

Lastly, although it is an appropriate criterion when measuring emigration, the place of residence one year earlier is less so when creating a picture of recent emigrants to the United States, since the number of emigrants and sample sizes are too small to support detailed analyses. This is why a second population, 'Canadians residing in the United States,' is also examined. This population is limited to individuals

born in Canada who do not have American citizenship or who obtained it through naturalization. For the sake of brevity, we have used the term 'Canadian' to refer to Canadian-born persons.

Temporary emigration and permanent emigration

With a few exceptions, the ACS covers only individuals residing in the United States at the time of the survey and wanting to stay for a period of over two months. Canadians travelling in the United States are therefore generally excluded from the survey.

Moreover, Canadians who spend a number of months in the United States and have a residence there, like 'snowbirds,' who live for part of the winter in some of the warmer states, are a special case. Since data are collected throughout the year, some of these Canadians could be included in the ACS, although often the type of residence they occupy makes it improbable.

Moreover, emigration is normally determined to be temporary or permanent according to the duration of residence or legal residence status, information not found in the ACS.² As a result, although ACS data provide information on both temporary and permanent movements, the data do not distinguish between the two. In this study, the figures from the ACS therefore pertain to both permanent and temporary emigration, as long as it is for a period of at least two months.

Year of entry into the United States

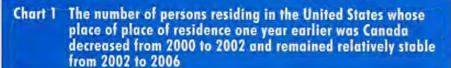
The year of entry into the United States, available in the ACS, is very useful in identifying Canadians who have recently emigrated to the United States. We must point out, nonetheless, that there is some inaccuracy in cases where an individual entered the United States more than once. Although, in theory, the respondent must provide the most recent year in which he or she entered the United States, the wording of the question is not very clear.³

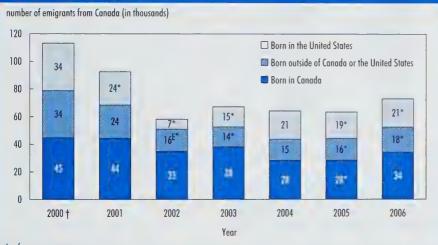
1. United Nations. 1998. Recommendations on Statistics of International Migration – Revision 1, United Nations Publication ST/ESA/STAT/ SER.M/58/ Rev. 1, New York.

This definition matches the UN recommendations, according to which the foreign population of a country includes persons who have their place of residence in that country but whose place of birth is in another country. Furthermore, by excluding individuals with American citizenship at birth, only those people eligible to be admitted for permanent residence in accordance with the immigration laws can be considered, and this exclusion is also in conformance with these recommendations. These individuals

What you should know about this study (continued)

- represented 8.7% of all people born in Canada and who entered the United States between 2000 and 2006.
- 2. United Nations. 1998. The United Nations suggests a distinction based on the length of stay, distinguishing between 'long-term' migrants (those who have been living in the country of destination for one year or more) and 'short-term' migrants (those who have been living in the country of destination for at least three months but less than twelve months). However, this criterion does not
- apply to annual migratory flows in the ACS since, by definition, the migrants cannot have migrated more than one year earlier.
- 3. The question is worded as follows: "When did this person come to live in the United States?" Although the interviewers were instructed to ask for the most recent year, it is uncertain whether the question was interpreted correctly if the respondent did not ask for clarification from the interviewer or if responses were sent by mail.





† reference group

 * statistically significant from reference group at p < 0.05

Note: Since 2006, the American Community Survey has included persons living in community dwellings. For comparison purposes with previous years, these persons were excluded. However, the proportion of those living in a collective dwelling in 2006 and who were living in Canada one year earlier was minimal.

Sources: U.S. Census Bureau, data from the 2000-2003 American Community Survey.

U.S. Census Bureau, Public Use Microdata Files from the 2004-2006 American Community Survey.

United States and those born outside of the United States and Canada. The number of individuals born in the United States and making a 'return migration' to their country of birth dropped between 2000 and 2001 as well as between 2001 and 2002, but subsequently increased between 2002 and 2003. The number of individuals born outside the United States and Canada and making a 'secondary' migration to the United States was

lower in 2002 than in 2000, but has stabilized since then.

The observed drop in emigration from Canada to the United States is supported by the findings of the Canadian census' Reverse Record Check (RRC),⁵ which shows that the number of emigrants to the United States decreased significantly from 2001 to 2006. According to RRC data, approximately 167,000 individuals living in the United States in 2006

resided in Canada five years earlier, compared to 214,000 individuals in 2001 (Chart 2).

As a result of the recent decrease in the number of emigrants from Canada to the United States. Canada's net migration resulting from migratory exchanges with its neighbour to the south improved from 2001 to 2006, with the number of emigrants from the United States to Canada remaining very stable (Table 1). A comparison of data from the ACS on annual flows with data from the 2001 and 2006 Canadian Censuses shows that although total migration from Canada to the United States was larger than migration from the United States to Canada, the gap has narrowed. For each emigrant from the United States to Canada, there were 2.2 individuals crossing in the opposite direction in 2001; however, this number dropped to 1.7 in 2006.6

The 2006 RRC shows that Canadian emigrants to the United States accounted for one-third of emigrants in the intercensal period from 2001 to 2006. Although this is a significant decrease compared to the previous intercensal period (in which 45.5 % of emigration was to the United States), the United States has nonetheless remained the most popular destination for Canadian emigrants.⁷

Fewer temporary emigrants among recent emigrants

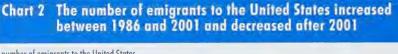
The decrease in the number of emigrants to the United States observed in the ACS data may conceal

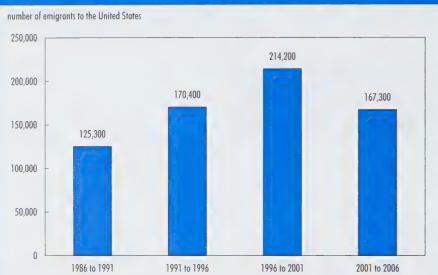
differences between permanent and more temporary emigration trends. Using the RRC, it is possible to examine if emigrants intend to return to their homeland, which can then be used to estimate permanent and temporary emigrants. Indeed, recent RRC data indicate that the decrease in emigration to the United States was observed for both temporary and permanent emigrants. However, the proportion of temporary emigrants

out of total emigration to the United States decreased slightly compared to the previous intercensal period. That is, RRC data indicate that in 2006, approximately one-third of emigrants from Canada to the United States intended to return to Canada, compared to 37% in 2001.

Permanent emigration tends to remain more stable over time, due to the limited number of permanent immigrants the United States permits per country. As a result, since 2000, the number of individuals from Canada that were granted permanent resident status remained relatively unchanged and close to the limit. 10

The terms of the North American Free Trade Agreement (NAFTA) greatly facilitate the temporary emigration of individuals wanting to work in the United States. Since visas can be obtained relatively quickly and renewed indefinitely, temporary emigration has become a viable option for many Canadians. ¹¹ Moreover, the significant increase in the number of emigrants from Canada to the United States observed in the 1990s, and mainly since 1994, the year NAFTA came into effect, is mainly attributable to a higher





Note: The totals for 1996 to 2001 and 2001 to 2006 were revised in order to exclude those whose emigration date preceded the period covered. Since the totals for 1986 to 1991 and 1991 to 1996 could not be corrected, they were probably slightly overstated.

Source: Statistics Canada, Reverse Record Check for the Census of Population (1991, 1996, 2001 and 2006).

Table 1 Annual migratory exchanges between Canada and the United States, 2001 and 2006

					Place	of birth			
		C	anada	Unit	ted States	Countr Canada or	y other than the United States		Total
		number	percentage	number	percentage	number	percentage	number	percentage
2001	Migrants from the United States to Canada	9,900	23.9	19,700	47.5	11.900	28.6	41.600	100.0
	from Canada to the United States	44,300	47.9	24,200	26.1	24,100	26.0	92,500	100.0
2006	from the United States to Canada	11,100	25.9	19,300	44.8	12,500	29.2	42,900	100.0
	from Canada to the United States	34,200	47.6	20,500	28.0	18,300	24.4	73,000	100.0

Sources: U.S. Census Bureau, data from the American Community Survey, Public Use Microdata Files from the 2006 American Community Survey, and the 2001 and 2006 Censuses, Statistics Canada.

number of Canadians entering the United States with a temporary visa. 12

Nowadays, although there is still a distinction between temporary and permanent migration from a legal point of view, the line is blurring. Some temporary visa holders can apply for permanent resident status.¹³ In fact, emigrating to the United States by transitioning from temporary to permanent status is increasingly popular for a growing number of workers.¹⁴

The number of Canadian-born persons in the United States continued to increase between 2000 and 2006, but at a slower pace

In addition to measuring annual migratory flows from Canada, ACS data can be used to provide a picture of individuals born in Canada who reside in the United States. According to the ACS, approximately 847,200 persons born in Canada resided in the United States in 2006. Their numbers have increased since 2000, but this growth has been slower than the rate recorded in the decade ending in 2000 (Chart 3). Since 2000, the number of Canadians residing in the United States has grown at an annual average rate of 0.5%, one-half the rate observed during the 1990s. This decrease may be the result of a number of factors, such as a decrease in migratory flows from Canada to the United States, increased return or secondary migration of Canadianborn persons, or simply deaths.

Canadian-born persons who emigrated to the United States between 2000 and 2006 were relatively young

The age profile of Canadians residing in the United States is somewhat different from those born in the United States. Overall, Canadians residing the United States are underrepresented within the youngest groups and over-represented in the oldest groups (Chart 4). One of the reasons for the under-representation at the youngest ages is because when

Chart 3 The number of Canadians living in the United States rose from 1990 to 2006, but remained under the peak reached in 1930

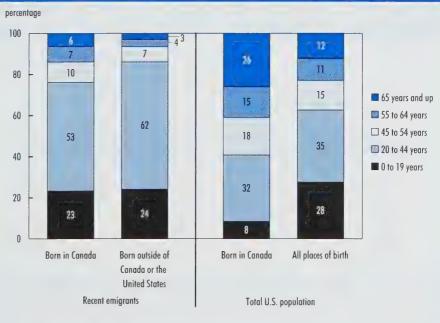


Note: Some conceptual and methodological differences bias the comparisons between the data from the American Community
Survey (ACS) and those from the U.S. censuses. For example, census data are collected on a set date every 10 years, whereas
ACS data are collected throughout the year. Therefore, seasonal variations are possible. In addition, the ACS excludes persons
who are only living at their address temporarily, that is, for less than two months.

Sources: U.S. Census Bureau, ten-year data from the U.S. censuses (1900 to 2000).

U.S. Census Bureau, Public Use Microdata Files from the 2006 ACS.

Chart 4 The recent Canadian-born emigrants living in the United States are younger than the total U.S. population



Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

emigrants give birth to children in the United States, the children are not considered emigrants. At the older end of the age continuum, the Canadian emigrant cohorts who arrived in the United States prior to 1980 continue to have considerable demographic weight in relation to the younger age groups.

The most recent cohort is younger, however, much like other recent immigrants to the United States. While the median age of all Canadians residing in the United States was 49 in 2006, the median age was only 31 for Canadians who emigrated between 2000 and 2006. In addition, many of these recent emigrants were of prime working age: over one-half (approximately 53%) were between 20 and 44 years of age. Only around 10% were aged 60 or older.

Lastly, Canadians who emigrated recently were also generally very young compared to the Canadian population where the median age according to the 2006 Census was 39.5.

Nearly 60% of Canadian emigrants who arrived in the United States between 2000 and 2006 lived in just seven states

Canadians who live in the United States have certain location preferences. In 2006, nearly 60% of Canadians who had emigrated to the United States between 2000 and 2006 had chosen to take up residence in one of the following seven states: Florida, California, New York, Texas, Arizona, Washington and Michigan (Table 2). In comparison, these seven states contained approximately 40% of the total U.S. population in 2006.

Florida tops the list for recent emigrants from Canada with a total of 27,500 Canadians who emigrated between 2000 and 2006 (17.8% of all recent Canadian emigrants). With a median age of 47, recent emigrants living in Florida were relatively older. 15 California had the second highest number of recent Canadian emigrants. Approximately 19,000 Canadians who migrated to the United States between 2000 and 2006 were living there, accounting for more than onetenth (12.3%) of all recent emigrants

to the United States. California is also the state with the highest number of Canadian residents irrespective of the period of arrival.

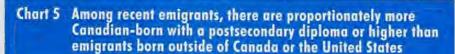
With a median age of 31, Canadians who recently emigrated to California were much younger than those who chose to reside in Florida. These comparisons highlight the diversity of Canada's emigration. For example, employment and education are likely the most frequent reasons for migrating to the states with relatively young emigrants. Most of these states have major cities or universities that are likely to attract a population of skilled workers or students. This is particularly true in California, New York, Texas and Michigan. In addition, the geographic closeness of urban centres, such as New York, Syracuse and Detroit, may have also contributed to the influx of Canadians.

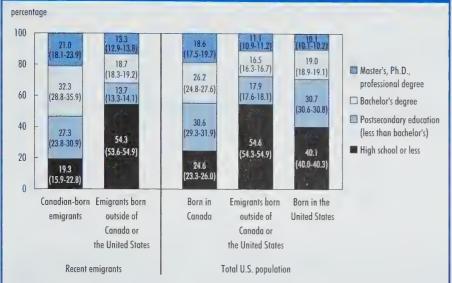
Conversely, recreational activity during or near retirement is likely a greater factor in migrations to Florida and Arizona, two states known for their warm climates.

Table 2	Canadian-born	emigrants to the Un	ited States by residence status
		NAME AND ADDRESS OF TAXABLE PARTY.	

			Canadian	-born emigran	ts		
		Recent emigrants to ited States (2000 to		Residing in the United States in 2006			
	number	percentage	Median age	number	percentage	Rank by population size	
State of residence							
Florida	27,500	17.8	47	120,100	14.2	2	
California	19,100	12.3	31	133,800	15.8	1	
New York	13,800	8.9	32	55,600	6.6	3	
Texas	10,100	6.5	32	42,600	5.0	6	
Arizona	8,800 E	5.7 ^E	57	33,500	4.0	8	
Washington	7,000 E	4.5 ^E	33	49,400	5.8	4	
Michigan	5,900 ^E	3.8 ^E	27	45,600	5.4	5	
Other states	62,800	40.5	***	366,600	43.3		
Total	155,000	100.0	31	847,200	100.0	***	

Note: For states where the proportion of Canadians who emigrated between 2000 and 2006 is one of the highest. Sources: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.





Note: Professional degree includes, for example, diplomas in medicine, dentistry, chiropractic, optometry, osteopathy, pharmacy, podiatry, veterinary medicine, law and theology. Generally, the professional level is between a Master's and Ph.D.

The confidence intervals shown in brackets are 95%.

Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

More than one-half of recent Canadian emigrants to the United States aged 25 to 64 in 2006 had a university degree

Canadian-born residents of the United States are highly educated. According to ACS data for the population aged 25 to 64, close to 45% had a university degree in 2006 (Chart 5). In comparison, the proportion for the total U.S. population was only 29%.

Canadian-born emigrants aged 25 to 64 who relocated to the United States between 2000 and 2006 were also highly educated. More than one-half (53%) had a university degree in 2006, compared to 20% of Canadian-born residents remaining in Canada. ¹⁶

Regardless of birthplace, recent emigrants from Canada to the United States were highly educated. The ACS data indicate that in 2006, 52.4% of individuals aged 25 to 64 who had emigrated from Canada to the United States in the previous year had a bachelor's degree or higher (results not shown).

Nearly two-thirds of recent Canadian emigrants to the United States were employed

Canadians living in the United States are generally well integrated into the labour market. In fact, in 2006, nearly three-quarters (72.9%) of those aged 25 to 64 were employed. Although slightly lower, this finding is similar to that observed among people who were born in the United States (73.9%) (Table 3). In addition, proportionately less unemployment is observed among Canadians living in the United States than among American-born persons. Conversely, the percentage of people not in the labour force¹⁷ is slightly higher.

Recent emigrants stand out in the emigrant population with higher rates of labour force inactivity, and this is particularly true of recent Canadian-born emigrants. A possible explanation stems from the fact that the cohort of recent emigrants could consist of a relatively higher proportion of people who emigrated for non-work-related

reasons like pursuing an education or accompanying or joining a spouse. The results of a survey conducted in 1999 with Canadian college and university graduates of the class of 1995 who were living in the United States in 1997 tend to confirm this hypothesis. According to this survey, 17% of the new graduates had emigrated mainly for marriage or relationships, and 23% had immigrated to attend college or university. Those who had emigrated for employment accounted for only 57% of this emigrant population. 18

These data suggest that a large number of Canadians who did not specifically emigrate to the United States for work decided to stay and find work there. For example, according to the findings from the Survey of Earned Doctorates, 2004/2005, over 61% of Canadian doctoral students in American universities intended to stay in the United States upon completion of their studies.¹⁹

Recent Canadian emigrants to the United States work in fields that are often highly specialized and related to the knowledgebased economy

The ACS sample sizes do not allow for a detailed analysis of the types of occupations held by Canadianborn persons residing in the United States. A review by occupational group to which they belong does, however, show that a high proportion of recent emigrants work in fields where the occupations are often highly specialized and related to the knowledge-based economy, such as management, health, education, and business and financial operations (Table 4).

In 2006, the largest number of Canadians residing in the United States and in the labour market worked in management (67,000). A smaller proportion were working in this field among Canadians who emigrated to the United States before the 1990s (13.8%) than among Canadians who emigrated in the 1990s (17.9%) or later (18.0%).

Table 3 Employment status of the population 25 to 64 years residing in the United States, by place of birth, for the total population and recent emigrants, 2006

		Recent emigran	ts (2000	to 2006)			Total U	.S. population		
	_	Born in anada	of C	n outside anada or nited States		Born in anada	of C	n outside anada or nited States		rn in the ted States
	%	confidence interval	0/0	confidence interval	%	confidence interval	%	confidence interval	%	confidence interval
Employment status	// 1	//2.1 to 70.1\	68.0	(67.5 to 68.5)	72.9	(71.5 to 74.4)	73.0	(72.8 to 73.3)	73.9	(73.8 to 74.0)
Employed Unemployed Not in the labour force	66.1 F 31.1	(62.1 to 70.1) (27.1 to 35.0)	4.5	(4.3 to 4.8) (27.0 to 28.0)	2.8	(2.2 to 3.4) (22.9 to 25.6)	3.9	(3.8 to 4.0) (22.9 to 23.3)	3.8 22.3	(3.8 to 3.9) (22.2 to 22.4)

Note: Confidence levels are 95%.

Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

Table 4 Occupational groups of Canadians residing in the United States, by emigration period, 2006

			Workforce	by cohort and p	roportion w	ithin the coho	rt	
	Befo	re 1990	199	0 to 1999	200	0 to 2006		Total
	number	percentage	number	percentage	number	percentage	number	percentage
Occupational group								
Management	34,200	13.8	19,800	17.9*	13,000	18.0	67,000	15.5
Administrative support	37,700	15.1	11,400	10.3**	6,100	8.5	55,100	12.8
Sales and related occupations	27,900	11.2	12,200	11.1	6,100	8.4	46,200	10.7
Health	21,200	8.5	14,700	13.3**	7,000	9.7	42,900	10.0
Education, training and library occupat	ions 15,900	6.4	7,000	6.4	5,600	7.8	28,600	6.6
Business and financial operations	12,900	5.2	4,600	4.2	4,700 ^E	6.5 ^E	22,200	5.1
Arts, sports, recreation, design, media	7,700	3.1	6,200	5.6*	F	F	18,600	4.3
Other occupations	91,200	36.7	34,700	31.4*	25,000	34.7	151,000	35.0
Total	248,700	100.0	110,600	100.0	72,100	100.0	431,600	100.0

^{*} difference with the proportion observed in the previous cohort statistically significant at p < 0.05

Note: Includes the population 16 years and over with a job for the seven most prevalent occupations in 2006.

Source : U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

However, more than for any other occupational group, it was the emigration of physicians and health specialists that was most publicized and controversial in the 1990s. The fear of a doctor shortage in Canada and the increase in emigration of Canadian doctors certainly contributed, in part, to this phenomenon.^{20,21} The ACS data reflect this increase in the

number of emigrating health care professionals.²² Although they only represented 8.5% of those who emigrated from Canada to the United States prior to 1990, Canadians residing in the United States and working in the health field accounted for 13.3% of those who emigrated in the 1990s. The ACS data show, however, that the increased emigration of health professionals did

not persist between 2000 and 2006.²³

Nonetheless, health professionals are over-represented in the population of Canadians residing in the United States. In 2006, approximately 43,000 were working in a health occupation, representing one-tenth of all Canadians living in the United States with a job (Table 4). In comparison, in 2006, 4.3% of Canadian workers worked in a health

^{**} difference with the proportion observed in the previous cohort statistically significant at p < 0.01

Table 5 Industry sectors of Canadians residing in the United States, by emigration period, 2006

		Canadians residing in the United States								
				Co	hort					
	В	efore 1990	19	190 to 1999	200	0 to 2006		Total	Total	
	%	confidence interval	%	confidence interval	%	confidence interval	%	confidence interval	%	
Industry sector										
Health and social services	14.7	(13.0 to 16.4)	15.8	(13.6 to 18.1)	12.9	(9.6 to 16.3)	14.7	(13.5 to 16.0)	10.2	
Manufacturing	10.8	(9.3 to 12.4)	11.4	(9.1 to 13.7)	12.4	(10.1 to 14.6)	11.2	(10.1 to 12.4)	11.9	
Educational services	10.3	(8.9 to 11.7)	9.6	(7.6 to 11.6)	13.1	(10.1 to 16.0)	10.6	(9.5 to 11.6)	6.8	
Professional, scientific and		,		, ,		,		,		
technical services	8.7	(7.5 to 9.9)	12.0	(10.0 to 14.0)	14.0	(10.7 to 17.4)	10.4	(9.3 to 11.5)	6.7	
Retail trade	9.5	(8.0 to 11.0)	8.1	(6.2 to 10.0)	6.8	(4.9 to 8.7)	8.7	(7.7 to 9.7)	11.4	
Construction	6.7	(5.5 to 7.9)	5.2	(3.7 to 6.7)	F	***	6.0	(5.1 to 6.9)	6.3	
Finance and insurance	5.9	(5.0 to 6.8)	5.9	(4.1 to 7.7)	5.6 ^E	(3.6 to 7.5)	5.9	(5.1 to 6.6)	4.1	
All other industry sectors	33.3	(31.3 to 35.3)	31.9	(28.3 to 35.4)	30.5	(26.6 to 34.5)	25.7	(24.3 to 27.1)	38.1	
Total	100.0	•••	100.0	•••	100.0	•••	100.0	***	100.0	

Notes: Includes the population aged 16 years and over with a job for the seven most prevalent industry sectors in 2006.

The confidence intervals are 95%.

Sources: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey. Statistics Canada, Topic-based Tabulations, Catalogue No. 97-559-XCB2006009, 2006 Census.

occupation. The contrast is even greater if technician jobs are excluded from the health field group. 24 While they averaged only about 2.9% of the entire Canadian workforce in 2006, doctors and other health specialists, made up 8.2% of all Canadians residing in the United States with a job. 25

There were also differences in the industries that recent emigrants from Canada worked in compared to the industrial breakdown of workers in Canada. For example, in 2006, the highest proportion of Canadians having recently immigrated to the United States was in the professional, scientific and technical service sector (14%). In comparison, the proportion in the total Canadian population, based on the 2006 Census, was 6.7% (Table 5). Canadians who were recent emigrants to the United States were also significantly over-represented in the education sector.

Summary

The United States remains the most important destination for Canadian emigrants. However, the most recent data available show a decrease in migratory flows. Indeed, the number of migrants from Canada decreased between 2000 and 2006, and the annual growth in the number of Canadian-born persons in the United States declined.

This outcome was perhaps predictable considering the relative prosperity Canada enjoyed over the study period. Emigration tends to decrease in Canada when the economy is strong. ^{26,27} Policies encouraging skilled workers to stay in the country likely contributed to this phenomenon. ²⁸

Recently, much of the flow of Canadian-born individuals to the United States has been made up of young, highly educated individuals who work in areas with high skill requirements. Indeed, the ACS data show that 53% of emigrants from Canada between the ages of 25 and 64 had a university degree.

While the increasing emigration of health professionals was of great concern in the 1990s, the ACS data indicate that the rise in the emigration of health professionals has not persisted since 2000, although emigration for this group of professionals remains relatively high.



Patrice Dion is a senior analyst in the Demography Division and Mireille Vézina is an analyst in the Social and Aboriginal Statistics Division of Statistics Canada.

- 1. Zhao, John, Doug Drew and Scott Murray. 2000. "Brain drain and brain gain: The migration of knowledge workers into and out of Canada." Education Quarterly Review. Vol. 6, no. 3. Statistics Canada Catalogue no. 81-003-XIE.
 - DeVoretz, Don and Samuel A. Layrea. 1998. Canadian Human Capital Transfers: The United States and Beyond. Commentary 115. C.D. Howe Institute.
- Zhao et al. 2000. The losses represented approximately 0.1% of persons with employment income and less than 1% of the labour force in a given occupation. In addition, a comparison of the migration losses to the United States with the migration gains from international migration exchanges made it possible to put the extent of the brain drain into perspective.
- Cervantes, Mario and Dominique Guellec. 2002. "The brain drain: Old myths, new realities." OECD Observer. No. 230. Available at http://www.oecdobserver. org/news/fullstory.php/aid/673/ (accessed June 17, 2010).
- Michalowski, Margaret and Kelly Tran. 2008. "Canadians abroad." Canadian Social Trends. No. 85. Statistics Canada Catalogue no. 11-008-XIE. Since Canadian emigrants are also immigrants elsewhere, the authors examined the Canadian emigrant population in five countries, using data sources from these
- The purpose of this survey is mainly to measure census coverage, especially undercounting. It seeks to collect various data from people who were not enumerated in the census. An estimate of the number of individuals residing outside the country during a census year but who resided in Canada during the preceding census can be obtained from this survey.
- There are a few conceptual differences between ACS data and Canadian census data, particularly with respect to the two-month duration of residence ACS rule and the way in which data are collected (throughout the year for the ACS compared to a set date for the census).
- The substantial increase in emigration to Asia, due in part to the economic development of China and other Asian countries, is one of the main reasons for this decrease. According to census Reverse Record Check data, while 17.9% of Canadian emigrants chose a country in Asia from 1996 to 2001, this proportion jumped to 33.7% for the 2001 to 2006 period.

- 8. Temporary emigrants are those who resided outside Canada for at least six months with the intention of returning to Canada as well as those who resided outside Canada for less than two years but whose intentions of returning to Canada were unknown. Permanent emigrants are persons with no intention of returning to Canada as well as those who resided outside Canada for two years or more but whose intentions of returning to Canada were unknown.
- Jefferys, Kelly and Randall Monger. 2008. "U.S. legal permanent residents: 2007." Annual Flow Report. Office of Immigration Statistics, Policy Directorate. For example, in 2007, this limit was set at 26,120.
- 10. Office of Immigration Statistics. 2008. Yearbook of Immigration Statistics. U.S. Department of Homeland Security. Available at http://www.dhs.gov/files/ statistics/publications/yearbook.shtm (accessed June 17, 2010). The Office of Immigration Statistics releases data on the number of permanent resident admissions by country of birth and country of origin.
- 11. Since October 16, 2008, the length of stay allowed between each renewal for work visa holders for Canadian and Mexican workers under NAFTA has been three years (instead of one year).
- 12. Nadeau, S., L. Whewell and S. Williamson. 2000. "Beyond the headlines on the 'brain drain.'" Canadian Journal of Policy Research. Vol. 1, no. 1. ISUMA.
- 13. U.S. Citizenship and Immigration Services. 2006. Temporary Migration to the United States: Nonimmigrant Admissions Under U.S. Immigration Law. January. Office of Policy and Strategy.
- 14. Batalova, Jeanne. 2006. "The growing connection between temporary and permanent immigration systems." Insight. Migration Policy Institute.
- 15. The ACS data may include a percentage of Canadians who spend several winter months in the United States. Since these Canadians are generally relatively older, their presence could raise the median age of the Canadian population, mainly in warm-climate states. This is particularly the case for Florida and Arizona. See the details on temporary and permanent emigration in the methodology section for further details.
- 16. Statistics Canada. 2008. Educational Portrait of Canada, 2006 Census. Statistics Canada Catalogue no. 97-560-X. Ottawa.
- 17. The people who are not in the labour force include students, homemakers, seasonal workers, and persons living in institutions.

- 18. Frank, Jeffrey and Éric Bélair. 1999. South of the Border: Graduates from the Class of '95 Who Moved to the United States. Statistics Canada Catalogue no. 81-587. Ottawa, Statistics Canada and Human Resources Development Canada.
- 19. King, Darren. 2008. Doctoral Graduates in Canada: Findings from the Survey of Earned Doctorates, 2004/2005. Statistics Canada Catalogue no. 81-595. Ottawa.
- 20. Zhao et al. 2000. The study showed that, in 1996 and 1997, the highest rates of emigration were observed among physicians.
- 21. Skinner, Brett J. 2002. Medicare, the Medical Brain Drain and Human Resource Shortages in Health Care, Atlantic Institute for Market Studies. http://www.aims.ca/ library/BrainDrain.pdf (accessed June 17, 2010). Skinner, using Canadian Institute for Health Information data, showed that the total emigration of physicians from Canada, considering all destinations, climbed during the 1990s, peaking at 777 in 1994. Among them, 319 physicians were admitted as permanent residents to the United States and it is conceivable that most of the others were temporary emigrants who were also bound for the United States. The number of physicians admitted to the United States as permanent residents also grew considerably in the 1990s, reaching a peak of 522 in 1996. According to this study, by considering the total temporary and permanent emigration of physicians on the one hand and emigrants returning to Canada and new immigrants on the other hand, Canada recorded a net loss of physicians from 1994 to 1997.
- 22. The health professional group includes physicians as well as a number of other health specialists such as chiropractors, dentists, optometrists, pharmacists, audiologists, therapists, graduate nurses and veterinarians. It also includes technicians working in the health field.
- 23. Canadian Health Services Research Foundation. 2008. "Myth: Canadian doctors are leaving for the United States in droves." Myth Busters. March. http://www.chsrf.ca/mythbusters/html/ myth29 e.php. (accessed June 17, 2010). This study looks at physicians only and reveals that far fewer of them have been admitted to the United States as permanent residents lately. This number was over 500 in 1996, but dropped to 169 in 2003, 138 in 2004, and to only 122 in 2005 as well as in 2006.

- 24. ACS data show that approximately 1,300 physicians and other health specialists, excluding technicians, living in the United States were living in Canada one year earlier.
- 25. According to census data, close to 719,000 Canadians were working in the health sector in 2006, out of which 484,000 were not working as technicians. These estimates were obtained by associating the occupational groups in the National Occupational Classification (NOC) used in the ACS with the occupational codes of the National Occupational Classification for Statistics (NOC-S) used in the 2006 Census. Since the two classifications do not match perfectly, these estimates are somewhat uncertain. The conclusions
- drawn from these figures, however, are still conservative. At most, the proportion of Canadians working in a health occupation, as defined in the SOC used in the ACS, could rise to 5.8% and 3.1% if technicians were excluded from the calculation. Furthermore, although the match-up between classifications in the NOC (used in the ACS) and NOC-S (used in the census) proves to be relatively simple for health occupations, this is not the case for other occupational groups. This is why the comparisons are limited to this group of occupations.
- Finnie, Ross. 2006. International Mobility: Patterns of Exit and Return of Canadians, 1982 to 2003. Statistics Canada Catalogue no. 11F0019. Research paper.
- 27. Statistics Canada. 2008. Canada's Changing Labour Force, 2006 Census. Statistics Canada Catalogue no. 97-559-X. Ottawa. For example, according to 2006 Census data, total employment in Canada increased at an annual average rate of 1.7% between 2001 and 2006, ranking Canada as leader among the Group of Seven (G7) nations.
- 28. For example, in 2000, the Government of Canada created the Canada Research Chairs Program, a permanent program aimed at attracting and retaining some of the world's most accomplished and promising researchers.

Sharing their lives: women, marital trends and education

by Laetitia Martin and Feng Hou

Introduction

Society is constantly evolving. One of the major changes in the second half of the 20th century was the influx of women into the labour market, particularly in the early 1970s. At the same time as the evolving labour market was creating a heavier demand for highly skilled workers, the number of university students was growing. The increase in university attendance was more rapid among women than men, so much so that, in 2006, a larger proportion of women than men aged 25 to 29 held a university degree (33% of women and 23% of men).

Extended schooling among women affects the timing of transitions in their lives, including when they form unions. The most common path is to complete one's education, find a job and then enter a relationship.² In this context, researchers have focused on the tendency among women with a higher level of education to postpone starting a family or decide not to have children.3 How has the situation changed in recent years? Are women with a university degree still, as they were 25 years ago, less likely to be married than women without a university degree? When these women are married or in a common-law relationship, are they more likely than before to be living with a man who is also a university graduate?

Using data from the 1981 to 2006 Censuses, this article examines how the propensity to form unions (marriage or common-law) has changed for women aged 25 to 49 with a university degree and those without. It also compares the likelihood of female university graduates forming unions with similarly educated males in 2006 with the likelihood in 1981 (see "What you should know about this study").

An overview of unions in 2006

According to 2006 Census data, more than one-half of Canadian women aged 25 to 29 were in a union (marriage or common-law) in that year. The proportion of people in unions increases with age, with nearly three out of four women aged 45 to 49 in a union.

In every age group, marriage is more popular than common-law unions. However, younger women were more likely to be in a common-law union (23%) than older women (11%). Conversely, women aged 45 to 49 were almost twice as likely to be married as women aged 25 to 29 (62% and 32% respectively).

Education and marriage over time

In North America, female university graduates born before the 1960s

were less likely to marry than less-educated women.⁴ That is no longer the case in Canada. In fact, by 2006, there emerged a positive relationship between having a university education and being married. Indeed, women aged 25 to 49 with a university degree are now more likely to be married than less-educated women (57% and 53% respectively) (Table 1).

This reversal is also evident in the oldest age group (Chart 1). In 1981, Canadian women aged 45 to 49 with a university degree were less likely to be married (66%) than other women in the same age group (80%). The gap narrowed over time, however, and, by 2001, the percentage of married women was about the same for university graduates as for the other women (about 65%). And, in 2006, a slightly larger proportion of women aged 45 to 49 with a university degree were married than other women (65% compared to 61%) (Chart 1).

In the group aged 25 to 29, the difference in the proportion of married women with a university degree and those without shrank over the years (Chart 1). Even so, in 2006, women with a university degree remained slightly less likely to be married than other women (31% and 32% respectively).

What you should know about this study

This study is based on data from the 1981 to 2006 Censuses of Population. The analysis focuses on women from 25 to 49 years of age, since most Canadian women have completed their education by the age of 25, and since the proportion of Canadian women in unions levels out at the age of 49. The focus is on marital status by highest level of education. Since the number of same-sex unions is small and there are no data on such unions for years prior to 2001, this study relates to opposite-sex unions only.

Definitions

University graduate: A person with a bachelor's degree, a master's degree or a doctorate. This does not include persons with a university certificate or diploma below the bachelor level.

Educational homogamy: Partners with similar levels of schooling. In this study, there is educational homogamy when a woman with a university degree forms a union (marriage or common-law) with a partner also with a university degree.

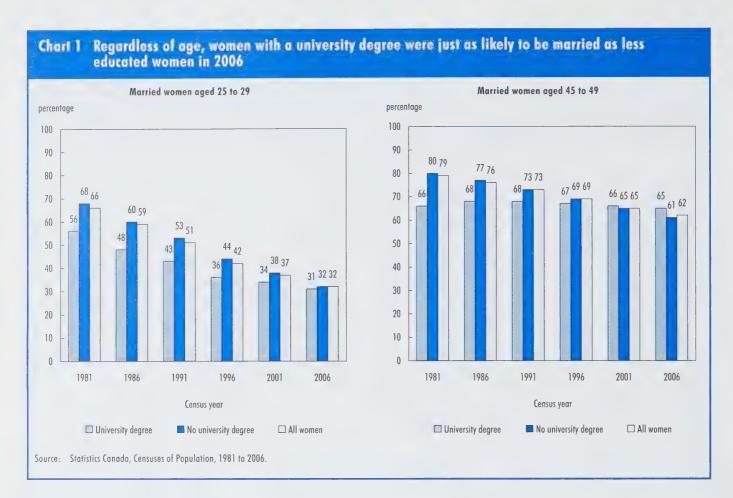
Marital status: Conjugal status of a person at the time of the census. Marriage and common-law union are combined. 'Married' includes all persons who are legally married but not separated and not living common-law with a person other than their spouse. 'Common-law' includes all persons who are living as a couple but not legally married to each other. Persons living in common-law unions can be legally unmarried, divorced or widowed. In the 1981 and 1986 Censuses, the data on common-law unions were based on responses concerning the relationship between persons. A direct variable was introduced in the 1991 Census.

Measurement of unions in the census: The census captures marital status on Census Day. The data do not distinguish whether it is the first union or a subsequent union. Accordingly, any unions prior to the Census Day union are out of scope.

Table 1 Women aged 25 to 49 by marital status, level of education and region of residence

	Canada		Que	ebec	Canada excluding Quebec				
	1981	2006	1981	2006	1981	2006			
		percentage							
In a marriage									
All women	75	54	72	37	76	60			
University degree	65	57	58	38	67	62			
No university degree	76	53	73	37	77	59			
In a common-law union									
All women	4	16	5	31	4	11			
University degree	5	13	8	30	4	8			
No university degree	4	16	5	32	4	12			
Not married and not in a common-law	union								
All women	21	30	23	31	20	30			
University degree	30	30	34	31	29	29			
No university degree	20	30	22	31	19	30			

Source: Statistics Canada, Censuses of Population, 1981 and 2006.



Common-law unions are less frequent among women with a university degree

Common-law unions have become more popular since 1981. The proportion of people aged 25 to 49 in a common-law union quadrupled in Canada, increasing from 4% in 1981 to 16% in 2006. In most cases, common-law unions appear to mark the starting point of conjugal life rather than a long-term situation.⁵ However, according to recent studies. in some instances common-law unions have become an alternative to marriage, particularly in Quebec.6 In 2006, 31% of women aged 25 to 49 who were living in Quebec were in a common-law union, while this was the case for 11% of women in the rest of Canada (Table 1).

In 2006, women with a university education were less likely to be in a common-law relationship than less-educated women. In Quebec, 30% of women with a university degree

were in a common-law union, a slightly smaller proportion than for less-educated women (32%). In the rest of Canada, the difference was more pronounced, with 12% of less-educated women and 8% of university graduates in common-law unions.

The difference in the tendency to be in a common-law union between university graduates and other women appears to have grown over time. This trend was observed for women aged 25 to 29 as well as for those aged 45 to 49 (Chart 2).

Educational homogamy

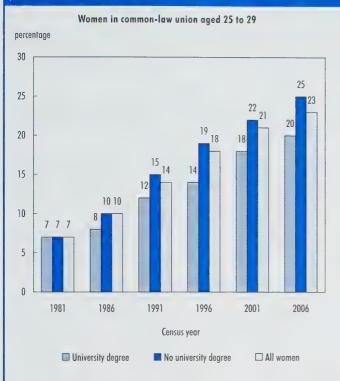
Education has always affected the choice of partners in modern Western societies.⁷ Schools and universities provide young people with a place where they can meet and discuss what they expect from life, their values and their cultural preferences. The workplace is another location for meeting potential spouses. Individuals who work together may have similar levels of education,

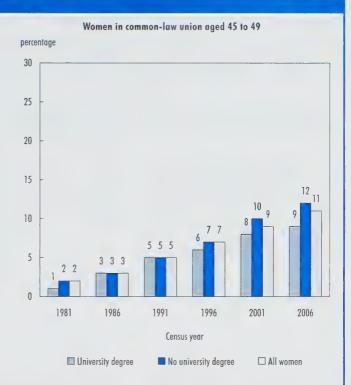
which can make it easier to find a partner with a similar level of education (educational homogamy).⁸

In 2006, women aged 25 to 49 were more likely to be highly educated than men in the same age category—about 1,543,000 women, or 27%, had a bachelor's degree or higher, compared with 23% of men. For every 100 women in this age group, 84 men in the same age group had a similar level of schooling. The opposite was true 25 years earlier. For every 100 women with a bachelor's degree or higher, 157 men had an equal amount of education.

Because of the increase in the number of female university graduates, men with a university degree had a better chance of having a partner with a degree in 2006 than in 1981. In 2006, 67% of men with a university degree were married to women with the same level of education, compared with 38% in 1981 (Chart 3).

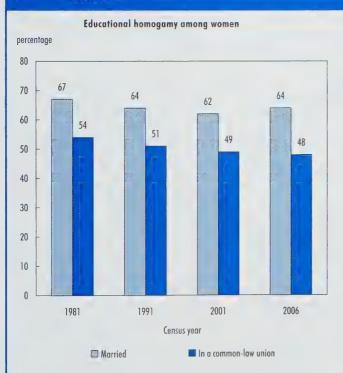
Chart 2 Common-law unions are less popular among women with a university degree, particularly those aged 25 to 29

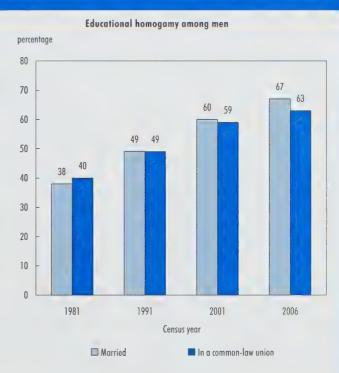




Source: Statistics Canada, Censuses of Population, 1981 to 2006.

Chart 3 Educational homogamy more common among married women than among women in a common-law union





Source: Statistics Canada, Censuses of Population, 1981 to 2006.

Interestingly, in 2006, married women with a university degree between the ages of 25 and 49 had a slightly lower tendency toward educational homogamy than 25 years earlier. For example, the proportion of women with degrees who had married men with the same level of education was 64% in 2006, compared with 67% 25 years earlier.

This slight dip in women's educational homogamy and the sharp increase in men's educational homogamy may be due to the more rapid growth in the rate of women's university graduation. Women with a university education would find fewer partners with comparable schooling to marry, whereas the reverse would be true for men.

Such changes could raise the proportion of women university graduates marrying men with less education than they have (similar to the situation of male university graduates in 1981). The observations made here suggest, however, that the decrease in the relative supply of university-educated men has so far had only a slight impact on the educational homogamy rate for these women.

For women with a university degree, the likelihood of having a partner with the same level of education was lower among those in common-law unions (48% in 2006) than among those who were married (64%). This difference may reflect less concern about their partners' earnings among women in common-law unions than among women in married couples 10 as partners in common-law relationships often have less legal and economic commitment to each other. 11 Some researchers point out that, despite the increasing popularity of commonlaw unions, marriage is still very highly regarded, and a great deal is expected of marriage in providing economic security. 12 While commonlaw couples are more likely to choose non-traditional models for the roles of the two partners, marriage is characterized by a higher level of economic interdependence between the spouses.¹³

Summary

Women have made substantial gains in education over the last few decades and are now more likely to have a university degree than men. In 2006, for every 100 women aged 25 to 49 with a university degree, there were 84 men with the same level of education. The corresponding ratio in 1981 was 157 men for every 100 women.

Over the last quarter-century, the conjugal situation of female university graduates has changed considerably. In 2006, women aged 25 to 49 with a university degree were more likely to be married than other women (57% and 53% respectively). In 1981, the opposite was true: 65% of women with a university degree were married, compared with 76% of less-educated women.

The majority of women with a university education marry men who also have a university education. This tendency has decreased slightly over the last quarter-century. The pattern is similar for women in commonlaw unions. In contrast, men with a university degree are increasingly likely to be married to or in a common-law union with a woman who also has a university degree.



Laetitia Martin is a subject-matter analyst in the Social and Aboriginal Statistics Division and Feng Hou is a senior researcher in the Social Analysis Division at Statistics Canada.

- Clark, Warren. 2007. "Delayed transitions of young adults." Canadian Social Trends. No. 84. Statistics Canada Catalogue no. 11-008-XIE.
- Shaienks, Danielle and Tomasz Gluszynski. 2009. Education and Labour Market Transitions in Young Adulthood, Culture, Tourism and the Centre for Education Statistics Research Papers. Statistics Canada Catalogue no. 81-595-MWE2009075.
- 3. Shaienks and Gluszynski. 2009.

Goldstein, Joshua R. and Catherine T. Kenney. 2001. "Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U.S. women." American Sociological Review. Vol. 66, no. 4. p. 506-519.

Clark. 2007.

- 4. Goldstein and Kenney. 2001.
- Milan, Anne and Josée Normand. 2003. "Would you live common-law?" Canadian Social Trends. No. 70. Statistics Canada Catalogue no. 11-008-XIE.

Goldstein and Kenney. 2001.

- Le Bourdais, Celine and Evelyne Lapierre-Adamcyk. 2004. "Changes in conjugal life in Canada: Is cohabiting progressively replacing marriage?" Journal of Marriage and Family. Vol. 66, no. 4. p. 929-942.
- 7. Halpin, Brendan and Tak Wing Chan. 2003. "Education homogamy in Ireland and Britain: Trends and patterns." British Journal of Sociology. Vol. 51, no. 4. p. 473-496.
 - Kalmijn, Matthijs. 1998. "Intermarriage and homogamy: Causes, patterns, trends." Annual Review of Sociology. Vol. 24. p. 395-421.
- Oppenheimer, Valerie Kincade. 1994. "Women's rising employment and the future of the family in industrial societies." Population and Development Review. Vol. 20, no. 2. p. 293-342.
- The gap in women's favour was wider
 in the younger age groups in 2006:
 10 percentage points in the 25 to 29 age
 group, 3 percentage points in the 35 to
 39 age group, and no difference in the
 forties.
- Blackwell, Debra and Daniel T. Lichter.
 2000. "Mate selection among married and cohabiting couples." Journal of Family Issues. Vol. 21, no. 3, p. 275-301.
- 11. Ambert, Anne-Marie. 2005. Cohabitation and Marriage: How Are They Related? The Vanier Institute of the Family. Ottawa.
 - Bumpass, Larry and Hsien-Hen Lu. 2000. "Trends in cohabitation and implications for children's family contexts in the United States." *Population Studies*. Vol. 54, no. 1, p. 29-41.
- 12. Seltzer, Judith A. 2004. "Cohabitation in the United States and Britain: Demography, kinship and the future." Journal of Marriage and Family. Vol. 66, no. 4. p. 921-928.
- 13. Kerr, Don, Melissa Moyser and Roderic Beaujot. 2006. "Marriage and cohabitation: Demographic and socioeconomic differences in Quebec and Canada." Canadian Studies in Population. Vol. 33, no. 1. p. 83-117.

Family, community, and Aboriginal language among young First Nations children living off reserve in Canada

by Evelyne Bougie

Introduction

Aboriginal languages are central to many First Nations people's identity.1 The 2006 Census recorded more than 60 different Aboriginal languages spoken by First Nations people in Canada, grouped into distinct language families (Algonquian, Athapascan, Siouan, Salish, Tsimshian, Wakashan, Iroquojan, Haida, Kutenai and Tlingit). Some Algonquian languages, such as Cree and Oiibway, are considered to have better long-term viability than other languages spoken by First Nations people because of their relatively larger base of speakers. However, even these more viable languages have experienced a decline in their use as the primary home language over the past two decades.²

According to the 1996 Royal Commission on Aboriginal Peoples, the passing down of Aboriginal languages across the generations was disrupted by residential schools in Canada, where the use of Aboriginal languages was prohibited. The Royal Commission also noted that the revitalization of Aboriginal languages in Canada is a key component for building both healthy individuals and healthy communities.³

Given the state of Canada's Aboriginal languages, information about Aboriginal language knowledge and the factors that are associated with language development and retention among today's First Nations children is relevant and important for those working to preserve, revitalize and promote Aboriginal languages.

It has been stated that for many First Nations children, the 'ideal' conditions for acquiring an Aboriginal language—such as both parents having an Aboriginal mother tongue and residing in a First Nations community—are not always possible.4 In this context, an exploration of the characteristics associated with Aboriginal language knowledge among young First Nations children residing off reserve is important. This article uses data from the 2006 Aboriginal Children's Survey to investigate the extent to which the home, the family, and the community can contribute to Aboriginal language knowledge among young off-reserve First Nations children aged 2 to 5 years in Canada (for more information on data and concepts see "What you should know about this study").

This article will explore two research questions: 1) To what extent do the families and communities of young off-reserve First Nations children provide opportunities to hear, learn and use Aboriginal languages? 2) Which family and community characteristics are associated with Aboriginal language⁵ knowledge among off-reserve First Nations children aged 2 to 5 years?

One in five off-reserve First Nations children were able to understand an Aboriginal language

According to the 2006 Aboriginal Children's Survey, 1 in 5 (20%) off-reserve First Nations children⁶ were able to understand an Aboriginal language (regardless of whether these were learned as mother tongues or as second languages). Cree and Ojibway were the languages understood by the largest number of off-reserve First Nations children.

Data also show that the vast majority (98%) of off-reserve First Nations children who understood an Aboriginal language could also understand a non-Aboriginal language (i.e., English and/or French). This indicates that most of these children

What you should know about this study

This article is based on data from the 2006 Aboriginal Children's Survey (ACS). The ACS was developed by Statistics Canada and Aboriginal advisors from across the country and was conducted jointly with Human Resources and Social Development Canada. The ACS provides an extensive set of data about Aboriginal (Métis, Inuit and off-reserve First Nations) children under 6 years of age across Canada. Indian settlements and reserves in the ten provinces were excluded from the target population for the survey. All First Nations children living in the Yukon and Northwest Territories were included

The ACS was conducted between October 2006 and March 2007. In the ACS, the child's parent or guardian responded to the survey. For the majority of First Nations children (89%), this person was the birth mother or father. Parents or guardians of approximately 10,500 Aboriginal children under 6 years of age, including more than 5,100 First Nations children living off reserve, provided information through a combination of personal and telephone interviews. The overall response rate for the survey was 81.1%. For more detailed information on the Aboriginal Children's Survey, please consult the Aboriginal Children's Survey 2006 Concepts and Methods Guide (Statistics Canada Catalogue no. 89-634).

In this article, ACS data include children whose parents identified them as North American Indian in response to the question: "Is (child) an Aboriginal person, that is, North American Indian, Métis or Inuit?" Data include children who were identified as North American Indian only and those identified as North American Indian in combination with another Aboriginal group (either Métis or Inuit). There are some instances where 2006 Census data are used. In this article, census data include children who were identified as North American Indian as a single response (i.e., not in combination with Métis or Inuit identity). In the 2006 Census and the 2006 Aboriginal Children's Survey, children were identified as "North American Indian," however, the term "First Nations children" is used throughout this article.

Statistical analysis and model building

Correlates of Aboriginal language knowledge were examined using logistic regression analysis. The final full model included a number of covariates categorized under sociodemographic,

home/parent, extended family, child care, and community factors. The initial sample consisted of 3,640 off-reserve First Nations children between the ages of 2 and 5. The analysis included 2,780 children (76% of the initial sample) with no missing values for any of the covariates included in the model.

Covariates were retained for inclusion in the preliminary full model if they were found to be related to Aboriginal language knowledge at p < 0.25 in preliminary single variable models. The full model was simplified by deleting the covariates that did not contribute to Aboriginal language knowledge at p < 0.05 when all the covariates were included. Some covariates that did not significantly contribute were nonetheless kept because they provided a needed adjustment of the effect of the covariates that remained in the model, or because of their theoretical importance. The covariates that were initially considered but later deleted from the model because their presence or absence did not change the results from the final full model were the following: child's sex and age; parent's sex; parental residential school attendance; parental employment status; and parental Aboriginal identity.

This article's statistical analysis measures the odds of understanding an Aboriginal language (as reported by the parent or guardian), isolating the impact of one characteristic of interest at a time. The odds ratios were estimated through a weighted regression that used ACS survey weights, with variance estimation done through survey bootstrapping.

It is important to understand that the direction of the relationship between children's ability to understand an Aboriginal language and the factors under investigation is difficult to determine. As such, results from this study are best interpreted as highlighting correlations between variables. It should also be emphasized that this study investigated children's ability to understand an Aboriginal language as perceived and reported by their parent or guardian. More objective measures of language abilities are not available in the ACS.

Hosmer, David W. and Stanley Lemeshow. 2000. Applied Logistic Regression. 2nd edition. Toronto. John Wiley & Sons, Inc. p. 92-104.

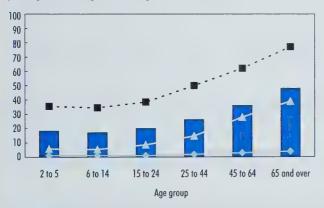
Aboriginal languages in Canada: Snapshots from the census

First Nations children make up a growing proportion of all children in Canada, particularly in Manitoba, Saskatchewan, Yukon and the Northwest Territories. In 2006, the census enumerated about 57,110 First Nations children aged 2 to 5 across Canada, 82% of whom were Registered or Treaty Indians.¹

According to the 2006 Census, 18% of First Nations children across Canada had an Aboriginal language as their mother tongue (or first language learned), down from 21% in 1996. Older generations of First Nations people are generally more likely than younger generations to have an Aboriginal language as their mother tongue (Chart 1). Notably in 2006,

Chart 1 Older generations of First Nations people were generally more likely than younger generations to have an Aboriginal language as their mother tongue in 2006

percentage with an Aboriginal mother tongue



All First Nations people in Canada

On-reserve First Nations people with registered Indian Status
 Off-reserve First Nations people with registered Indian Status
 Off-reserve First Nations people without registered Indian Status

Note: The "on-reserve" population includes First Nations people living on reserve in the ten provinces. The "off-reserve" population includes First Nations people living off reserve in the ten provinces and all First Nations people living in the territories.

Source: Statistics Canada, Census of Population, 2006.

48% of First Nations people aged 65 and over and 36% of those aged 45 to 64 had an Aboriginal mother tongue. An exception to this trend can be observed for off-reserve First Nations people without registered Indian status, for whom the proportions reporting an Aboriginal mother tongue are relatively small across all age groups.

The decreasing share of First Nations children reported to have an Aboriginal mother tongue from 1996 to 2006, coupled with the higher proportions reporting an Aboriginal mother tongue among older generations of First Nations people, indicate some erosion in the intergenerational transmission of Aboriginal languages in Canada.

Data from the 2006 Census also show that having an Aboriginal mother tongue is more common among the Registered Indian population living on reserve (Chart 1). For instance, 36% of First Nations children who were Registered Indians and who were living on-reserve at the time of the 2006 Census had an Aboriginal language as their first language.² Off-reserve, these figures were lower at 6% for First Nations children who were Registered Indians and 1% for those who did not have registered Indian status.

- 1. Registered Indians or "status Indians" are people who are entitled to have their names included on the Indian Register, an official list maintained by the federal government. Certain criteria determine who can be registered as a status Indian. Only Registered Indians are recognized as Indians under the Indian Act, which defines an Indian as "a person who, pursuant to this Act, is registered as an Indian or is entitled to be registered as an Indian." Status Indians are entitled to certain rights and benefits under the law. Generally speaking, Treaty Indians are persons who are registered under the Indian Act and can prove descent from a band that signed a treaty. For more information, see the Indian and Northern Affairs Canada website at: http://www.ainc-inac.gc.ca/ap/tln-eng.asp
- 2. There were 22 incompletely enumerated Indian reserves and settlements in the 2006 Census. Data are not available for incompletely enumerated Indian reserves and settlements and these areas are not included in the tabulations.

appear to be learning an Aboriginal language alongside English or French, and that some may be learning their Aboriginal language as a second language. This observation appears to be supported by the fact that English or French was the primary language spoken at home for the majority (90%) of off-reserve First Nations children. About 10% of children were spoken to primarily in an Aboriginal language at home: 8% in combination with English or French, and 1% exclusively in an Aboriginal language.

It has been suggested that the intergenerational transmission of Aboriginal languages may be difficult when the language is not used at home.8 The home, however, is not the only setting where children can be exposed to languages. Research suggests that different social environments can provide supports for language acquisition. Parents, the family, and the community have all been shown to play an important role in the transmission of Aboriginal languages to children. 10 Child care facilities and schools, as well as other settings with caregiverchild interactions, also provide communicative opportunities that can influence language acquisition. 11

There is evidence that the preschool years are a time when

language skills are emerging. 12 The 2006 Aboriginal Children's Survey provides information on young children's exposure to Aboriginal languages in many different contexts, as well as information on the involvement of parents, extended family members, and other child care providers in children's lives. Taken together, these data offer a more complete picture of the extent to which the families and communities of off-reserve First Nations children can provide opportunities to hear, learn, and use Aboriginal languages.

To what extent do the families and communities of off-reserve First Nations children provide opportunities to hear, learn and use Aboriginal languages?

The home environment naturally impacts the transmission of an Aboriginal language from parent to child. According to the 2006 Aboriginal Children's Survey, 17% of young off-reserve First Nations children had (at least) one parent with an Aboriginal mother tongue (Table 1). Moreover, 1 in 5 (20%) children were exposed to an Aboriginal language on a daily basis at home, and almost one-third (31%) had parents who helped them understand First Nations culture and history. As for parental attitudes

toward Aboriginal languages, the majority (68%) of young off-reserve First Nations children had parents who believed it was "very important" or "somewhat important" for their children to speak and understand an Aboriginal language.

Contact with Aboriginal languages can also be made through interactions with extended family (see "Aboriginal languages in Canada: Snapshots from the census"). For example, in 2006, 44% of young off-reserve First Nations children had grandparents and 28% had other relatives who were involved in raising them. A sizeable proportion of children also spent time "talking or playing together" on a daily basis with their grandparents (27%) or aunts and uncles (17%). In addition, one-quarter (25%) of children had grandparents, and one-tenth (10%) had an aunt or uncle, who helped them understand First Nations culture and history.

Off-reserve First Nations children can also be exposed to Aboriginal languages in the context of child care. About 8% of off-reserve First Nations children had a teacher or child care provider who helped them understand First Nations culture and history. About 8% were in child care arrangements¹⁴ where Aboriginal languages were used.

The community where children live is another context that can

Table 1	Characteristics of	all-recome	First Nations children	anad 2 to 5 Cana	da 2004
THORU I	Characterization of	on-reserve	riisi nallons chilaren	agea z 10 3, Cana	III, LUUU

	percentage		percentage
Sociodemographic characteristics		Parent's level of education	
Child's registered Indian status		Less than high school	31
Without	42	High school	25
With	58	Some postsecondary	11
Child's living arrangements		Completed postsecondary	33
Two parents	58	Average household income	in dollars
One parent	39	Lowest quintile	13,600
Other (living with relatives or with non-relatives only)	3	Second quintile	25,600
Parent's age (in years)		Third quintile	40,000
45 and over	7	Fourth quintile	59,900
35 to 44	27	Highest quintile	109,400
25 to 34	50	riighesi quiline	107,400
24 and under	16		

Table 1 Characteristics of off-reserve First Nations children aged 2 to 5, Canada, 2006 (continued)

	percentage	p	ercenta
Household size		Focused attention ("talking or playing together")	
Two persons	8	from grandparents	
Three persons	21	Less than daily ³	73
Four persons	32	Daily ²	27
Five persons	20	Focused attention ("talking or playing together")	
Six persons	10	from uncles or aunts	
Seven persons or more	9	Less than daily ³	83
Region	/	Daily ²	17
Atlantic	5	Child care	
Quebec	6	Child care arrangements	
Ontario		Attends child care where Aboriginal languages are used	8
	26	Attends child care where Aboriginal languages are not used	42
Manitoba	14	Does not attend any regular child care	50
Saskatchewan	12	Teacher/child care provider helps child to underst	and
Alberta	16	First Nations culture and history	
British Columbia	17	No	92
Territories	4	Yes	8
lome and family characteristics		Community	
Parent's mother tongue		Community as a place with First Nations cultur	al activi
Non-Aboriginal	83	Fair / Poor	57
Aboriginal	17	Good / Very good / Excellent	43
Exposure to Aboriginal languages at home		Exposure to Aboriginal languages at the home of	others
Less than daily	80	Less than daily ¹	91
Daily ²	20	Daily ²	9
Parents help child to understand First Nation	ns culture	Exposure to Aboriginal languages in the communi	tv
and history		Less than daily ¹	92
No	69	Daily ²	8
Yes	31	Exposure to Aboriginal languages through media	
Importance of speaking and understanding	an	Less than daily ¹	95
Aboriginal language		Daily ²	5
Not very important / Not at all important	32	Participation in traditional activities such as singi	-
Somewhat important / Very important	68	drum dancing, fiddling, gatherings and ceremonie	
Grandparents involved in raising the child		Less than monthly ⁴	79
No	56	At least monthly ⁵	21
Yes	44	Participation in hunting, fishing, trapping,	2.1
Other relatives involved in raising the child		camping activities	
No	72	Less than monthly ⁴	88
Yes	28	At least monthly ⁵	12
Grandparents help child to understand First culture and history		Participation in seasonal activities such as berry picking or gathering wild plants	
No No	75	Less than monthly ⁴	91
Yes	25	At least monthly ⁵	9
Uncles or aunts help child to understand Firs			,
No No	90		
Yes	10		

- 1. Includes responses of more than once a week, once a week, at least once a month, at least once a year, less than once a year and never.
- 2. Includes responses of more than once a day and once a day.
- 3. Includes responses of more than once a week, once a week, less than once a week, and never.
- 4. Includes responses of at least once a year, less than once a year and never.
- 5. Includes responses of more than once a day, once a day, more than once a week, once a week and at least once a month.

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

contribute to the passing down of Aboriginal languages to children. According to the Aboriginal Children's Survey, 9% of young off-reserve First Nations children had daily exposure to Aboriginal languages at the home of others ("others" could include family members not living in the child's household, neighbours, family friends, etc.). Moreover, 8% of children had daily exposure to Aboriginal languages in their community, and 5% through media (such as TV, DVDs, radio or books). About 43% of off-reserve First Nations children had parents who rated their community as an "excellent," a "very good," or a "good" place for First Nations cultural activities.

Participation in traditional activities may provide unique opportunities for exposure to Aboriginal languages. About 21% of young off-reserve First Nations children participated in or attended traditional First Nations activities (such as singing, drum dancing, fiddling, gatherings and ceremonies) at least once a month. In addition, about 12% of children took part in hunting, fishing, trapping or camping, and 9% participated in seasonal activities (such as berry picking or gathering wild plants) at least once a month.

Taken together, these data suggest that there are some opportunities in the families and communities of young off-reserve First Nations children to potentially learn an Aboriginal language, either through different social networks or through different activities. The next section explores the association between these family and community characteristics and children's knowledge of an Aboriginal language.

Which family and community characteristics are associated with Aboriginal language knowledge?

A logistic regression model was developed to explore the contribution of different individual, socioeconomic and family and community characteristics of young off-reserve First Nations children to their knowledge of an Aboriginal language. The analysis estimated the likelihood that a child with a given characteristic was able to understand an Aboriginal language, while isolating the effects of other characteristics. Results from this analysis should be interpreted as highlighting correlations between variables, not as causation (see "What you should know about this study" for more information about the logistic regression model).

Analysis of the 2006 Aboriginal Children's Survey revealed that there are a number of home, extended family, child care arrangement and community characteristics associated with the ablity of young off-reserve First Nations children to understand an Aboriginal language (Table 2).

The language environment within the home plays an important role in the likelihood of understanding an Aboriginal language

All of the characteristics related to the language environment within the home were found to be associated with children's knowledge of an Aboriginal language, once all other characteristics were taken into account. In particular, daily exposure to an Aboriginal language at home was strongly linked with Aboriginal language knowledge. The odds of understanding an Aboriginal language for young off-reserve First Nations children who were exposed to an Aboriginal language on a daily basis at home were 6.6 times the odds for children who were not.

Parental mother tongue was also associated with young children's Aboriginal language knowledge. The odds of understanding an Aboriginal language for off-reserve First Nations children whose parent had an Aboriginal mother tongue were about twice the odds for children whose parent had a non-Aboriginal language (e.g., English and/or French) as their mother tongue.

Parental beliefs and involvement matter

Parental beliefs regarding the importance of Aboriginal languages also appear to be related to young children's knowledge of an Aboriginal language. Once all other characteristics were taken into account, the odds of understanding an Aboriginal language for off-reserve First Nations children whose parent thought it "very" or "somewhat" important that their child speak and understand an Aboriginal language were about twice the odds for children whose parent thought it "not very" or "not at all" important.

Off-reserve First Nations children who had parents who helped them understand First Nations culture and history were also found to have higher odds of understanding an Aboriginal language compared to children whose parents did not provide such help (Table 2).

Having extended family members who can speak an Aboriginal language and help children understand their culture is important

The extended family can also play a role in the transmission of Aboriginal languages to children. Once all other characteristics were taken into account, off-reserve First Nations children who had an aunt or uncle who helped them understand First Nations culture and history had higher odds of understanding an Aboriginal language compared to children who did not receive such help (Table 2).

In addition, First Nations children whose grandparents were involved in raising them were found to have higher odds of understanding an Aboriginal language than children whose grandparents were not involved—presumably because grandparents are more likely to speak an Aboriginal language. Data from the 2006 Census show that Aboriginal language knowledge is more common among older generations of First Nations people.

Table 2 Logistic regression model predicting the odds of being able to understand an Aboriginal language, off-reserve First Nations children aged 2 to 5, Canada, 2006

	Odds ratio		Odds ratio
Sociodemographic characteristics		Other relatives involved in raising the child	
Child's registered Indian status		No †	1.0
Without †	1.0	Yes	1.1
With	2.0*	Grandparents help child to understand	First Nations cultur
Child's living arrangements		and history	
Two parents †	1.0	No †	1.0
One parent	1.0	Yes	1.2
Other (living with relatives or with non relatives only)	0.9	Uncles or aunts help child to understand	First Nations cult
Parent's age (in years)		and history	
45 and over †	1.0	No †	1.0
35 to 44	1.8	Yes	1.4*
25 to 34	3.0*	Focused attention ("talking or playing t	ogether") from
24 and under	4.8*	grandparents	
Parent's level of education		Less than daily ³ †	1.0
Less than high school	1.2	Daily ²	0.9
High school †	1.0	Focused attention ("talking or playing t	ogether") from
Some postsecondary	0.9	uncles or aunts	
Completed postsecondary	1.3	Less than daily ³ †	1.0
Household income (quintiles)	0.9	Daily ²	0.9
Household size (continuous)	1.0	Child care	
Region		Child care arrangements	
Atlantic	0.8	Attends child care where Aboriginal	2.7*
Quebec	0.9	languages are used	3.7*
Ontario	0.7	Attends child care where Aboriginal languages are not used †	1.0
Manitoba	0.5*		1.5*
Saskatchewan	0.7	Does not attend any regular child care Teacher/child care provider helps child t	
Alberta	0.7	First Nations culture and history	o unaerstana
	0.7	No †	1.0
British Columbia		Yes	2.3*
Territories †	1.0	Community	2.0
lome and family characteristics Parent's mother tongue		Community as a place with First Nati	ons cultural activit
Non-Aboriginal †	1.0	Fair / Poor †	1.0
Aboriginal	2.1*	Good / Very good / Excellent	1.4*
Exposure to Aboriginal languages at home	2.1	Exposure to Aboriginal languages at the	
Less than daily ¹ †	1.0	Less than daily ¹ †	1.0
Daily ²	6.6*	Daily ²	1.6*
Parents help child to understand First Nations		Exposure to Aboriginal languages in the	
history	Controlle und	Less than daily ¹ †	1.0
No †	1.0	Daily ²	0.7
Yes	1.8*	Exposure to Aboriginal languages throu	
Importance of speaking and understanding an		Less than daily ¹ †	1.0
Aboriginal language		Daily ²	0.8
Not very important / Not at all important †	1.0	Participation in traditional activities suc	
Somewhat important / Very important	2.3*	drum dancing, fiddling, gatherings and	
Grandparents involved in raising the child	2.0	Less than monthly ⁴ †	1.0
No †	1.0	At least monthly ⁵	1.2
Yes	1.4*	n loss monny	1.2
163	1.7		

Table 2 Logistic regression model predicting the odds of being able to understand an Aboriginal language, off-reserve First Nations children aged 2 to 5, Canada, 2006 (continued)

	Odds ratio		Odds ratio
Participation in hunting, fishing, tra	pping, camping activities	Participation in seasonal activities picking or gathering wild plants	such as berry
At least monthly ⁵	1.4*	Less than monthly ⁴ †	1.0
,		At least monthly ⁵	0.9

- t reference group
- * statistically significant difference from reference group at p < 0.05
- 1. Includes responses of more than once a week, once a week, at least once a month, at least once a year, less than once a year and never.
- 2. Includes responses of more than once a day and once a day.
- 3. Includes responses of more than once a week, once a week, less than once a week and never.
- 4. Includes responses of at least once a year, less than once a year and never.
- 5 Includes responses of more than once a day, once a day, more than once a week, once a week and at least once a month.

Note: The analysis is based on 2,780 children with no missing values on any of the covariates included in the model. The model correctly classified 85% of cases in the sample.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Child care arrangements where Aboriginal languages are used play a significant role

Teachers and child care providers can also contribute to the passing down of Aboriginal languages to children. Once all other characteristics were taken into account, the odds of understanding an Aboriginal language for off-reserve First Nations children who were in child care arrangements where Aboriginal languages were used were 3.7 times the odds for children who were in child care arrangements but were not exposed to Aboriginal languages in this context. Children who were not in regular child care arrangements had higher odds of understanding an Aboriginal language than children who were in child care arrangements but were not exposed to Aboriginal languages (Table 2).

Moreover, the odds of understanding an Aboriginal language for off-reserve First Nations children who had a teacher or child care provider who helped them understand First Nations culture and history were about twice the odds for children who did not receive such help.

The community also makes a difference

Social networks in the community appear to be linked with young children's Aboriginal language knowledge. Once all other characteristics were taken into account, off-reserve First Nations children who were exposed to an Aboriginal language on a daily basis at the homes of others had higher odds of understanding an Aboriginal language than children who were not (Table 2).

In addition, off-reserve First Nations children whose parents felt that their community was a "good," a "very good," or an "excellent" place for First Nations cultural activities were also found to have higher odds of understanding an Aboriginal language than children whose parents were less satisfied with the availability of cultural activities in their community (Table 2).

Participation in traditional activities and knowledge of an Aboriginal language are related

Aboriginal language knowledge and participation in traditional activities were found to be related. Once all

other characteristics were taken into account, young off-reserve First Nations children who took part in hunting, fishing, trapping or camping at least monthly had higher odds of understanding an Aboriginal language than children who participated in these activities less frequently (Table 2). Language and culture are tightly connected and it is difficult to identify the direction of the relationship between the two. Aboriginal language knowledge and participation in traditional activities could be associated because Aboriginal languages are more likely to be used in the context of traditional Aboriginal activities such as hunting, fishing, trapping or camping; alternatively, it could be that those who speak an Aboriginal language are more likely to frequently engage in these activities. Regardless of which comes first, these findings suggest that activities such as hunting, fishing, trapping or camping can provide unique occasions for voung First Nations children to hear, learn, and use their ancestral language.

Children with registered Indian status are more likely to know an Aboriginal language

Some sociodemographic characteristics were associated with Aboriginal language knowledge. Once all other characteristics were taken into account, the odds of understanding an Aboriginal language for young off-reserve First Nations children with registered Indian status were twice the odds for children without registered Indian status.

Younger parents were also found to be more likely to report that their child was able to understand an Aboriginal language. Off-reserve First Nations children whose parent was aged 24 and under, or between 25 and 34, had higher odds of understanding an Aboriginal language than children whose parent was relatively older (i.e., 45 and over) (Table 2). Further analysis would be required to better understand this relationship.

The following sociodemographic characteristics were included in the model but were not found to have a significant effect on children's language knowledge: family structure (that is living with one or two parents); parent's level of education; household income and household size. Region of residence was also included in the model: children living in Manitoba and in British Columbia had lower odds of understanding an Aboriginal language than children living in the territories.

Summary

This article uses data from the 2006 Aboriginal Children's Survey to identify some of the characteristics in the lives of young off-reserve First Nations children aged 2 to 5 that are associated with their ability to understand an Aboriginal language. Better knowledge of these characteristics is important for the survival of these languages.

The Aboriginal Children's Survey data indicate that opportunities for Aboriginal language acquisition can take place in different social environments and through different

activities in the lives of today's young off-reserve First Nations children. The home, however, seems to play a particularly important role: daily exposure to Aboriginal languages at home was the strongest predictor of off-reserve First Nations children's ability to understand an Aboriginal language, holding all other characteristics constant. Being in child care arrangements where Aboriginal languages were used, having parents who believed in the importance of speaking and understanding an Aboriginal language, and having at least one parent with an Aboriginal mother tongue were also found to be strong predictors of Aboriginal language knowledge for young off-reserve First Nations children.

Given that not all off-reserve First Nations children have the opportunity to be exposed to Aboriginal languages at home, the finding that the extended family (i.e., grandparents, aunts or uncles) also plays a role in passing down Aboriginal languages to young children is important. Moreover, at the community level, social networks and child care providers appear to contribute to the transmission of Aboriginal languages to young off-reserve First Nations children, even after accounting for family and sociodemographic characteristics. Finally, residing in a community perceived by parents as a good place for First Nations cultural activities, and frequently participating in hunting, fishing, trapping or camping, were also associated with off-reserve First Nations children's ability to understand an Aboriginal

While this study investigated the unique contribution of different characteristics to language knowledge, it is important to note that language knowledge is influenced by children's experiences over many years—especially if children are learning a language as a second language. The Aboriginal Children's Survey, however, only captures these experiences as reported at a single

point in time. In addition, there is evidence that off-reserve First Nations children who are exposed to an Aboriginal language both at home and outside the home are much more likely to be able to understand an Aboriginal language than children who are exposed exclusively at home or exclusively outside the home. ¹⁵



Evelyne Bougie is a researcher with the Social and Aboriginal Statistics Division of Statistics Canada.

- Canadian Heritage. 2005. Towards a New Beginning: A Foundation Report for a Strategy to Revitalize First Nations, Inuit and Métis Languages and Cultures. Report to the Minister of Canadian Heritage by the Task Force on Aboriginal Languages and Cultures. Ottawa. Catalogue no. CH4-96/2005.
- 2. Norris, Mary Jane. 2004. "From generation to generation: Survival and maintenance of Canada's Aboriginal languages within families, communities and cities." TESL Canada Journal. Vol. 21, no. 2. p. 1-16.
 - Norris, Mary Jane. 2007. "Aboriginal languages in Canada: Emerging trends and perspectives on second language acquisition." Canadian Social Trends. No. 83. Statistics Canada Catalogue no. 11-008-XIE.
- Royal Commission on Aboriginal Peoples. 1996. Report of the Royal Commission on Aboriginal Peoples: Gathering Strength. Vol. 3. Ottawa. Government of Canada.
- 4. Norris. 2004 and 2007.
- 5. In this article, Aboriginal language knowledge refers to children's ability to understand an Aboriginal language, as reported by parents in the Aboriginal Children's Survey in response to the question: "What language or languages can (your child) understand when someone speaks to him/her in that language?"
- 6. In this article, all references to "children" refer to those aged 2 to 5.
- Data on children's mother tongue are not available from the Aboriginal Children's Survey.
- 8. Canadian Heritage. 2005.
- Hoff, Erika. 2006. "How social contexts support and shape language development." Developmental Review. Vol. 26, no. 1. p. 55-88.

- 10. Norris. 2004.
- 11. Hoff. 2006.
- 12. Weigel, Daniel J., Jennifer L. Lowman and Sally S. Martin. 2007. "Language development in the years before school: A comparison of developmental assets in home and child care settings." Early Child Development and Care. Vol. 177, nos. 6 and 7. p. 719-734.
- 13. Norris, 2007.

- 14. Child care arrangements refer to the care of a child by someone other than a parent, including daycare, nursery or preschool, Head Start, and care by a relative or other caregiver. These refer to regular arrangements that are used consistently rather than sporadically (e.g., babysitting). These data refer to the main child care arrangement, that is, the arrangement in which the child spends the most time.
- 15. Bougie, Evelyne, Heather Tait and Elisabeth Cloutier. 2010. Aboriginal Language Indicators for Off-reserve First Nations Children Under the Age of Six in Canada, Statistics Canada Catalogue no. 89-643-X.

Need more information from Statistics Canada?

Call our inquiries line:

1-800-263-1136

To order publications:

Order line: 1-800-267-6677 Internet: infostats@statcan.gc.ca TTY line: 1-800-363-7629

Accessing and ordering information

Canadian Social Trends Print format, semi-annual (twice per year)* (Catalogue no. 11-008-X) \$24 per issue,

\$39 per annual subscription

PDF/HTML format, every 6 weeks (Catalogue no. 11-008-X): Free

* A CST print anthology is now issued twice a year. The anthology contains all the CST articles released electronically in the previous six months, and the subscription price remains the same.

Education and Library Discount: 30% discount (plus applicable taxes in Canada or shipping charges outside Canada)

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end. Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada tollfree at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "About us" > "The agency" > "Providing services to Canadians."

If you're on the move ...

Make sure we know where to find you by forwarding the subscriber's name, old address, new address, telephone number and client reference number to:

Statistics Canada Finance R.H. Coats Bldg., 6th Floor 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 076 or by phone at 1-800-263-1136 or

1-800-267-6677; or by fax at 1-877-287-4369; or by Internet at infostats@statcan.gc.ca

We require six weeks advance notice to ensure uninterrupted delivery, so please keep us informed when you're on the move!

Child care for First Nations children living off reserve, Métis children, and Inuit children

by Leanne C. Findlay and Dafna E. Kohen

Introduction

Over the past several decades, child care has become increasingly common in Canada, and, by 2003, an estimated 54% of Canadian children were in some type of non-parental care. I

Previous research has shown that child care has an impact on children's social and developmental outcomes. This research has shown that the quantity, quality, and type of care,² as well as regulatory status,3 influence children's wellbeing, in particular behavioural characteristics such as hyperactivity and positive peer involvement (also known as pro-social behaviour). For instance, participation in child care that is regulated (i.e., licensed) and high-quality (e.g., high in caregiver praise, with trained caregivers) is associated with fewer behavioural problems and more positive peer involvement. In a study of Canadian children, children in high-quality child care arrangements were reported to exhibit greater pro-social behaviours.4

Although factors such as type of child care, hours in child care and stability of child care are relevant to the Aboriginal population, it is also important, when examining the impact of child care on the Aboriginal population, to consider culturally relevant factors which may impact healthy child development. For example, important indicators of Aboriginal child care may include aspects specific to cultural stimulation in the care environment, 5,6 including the availability of culturally relevant activities. However, very little is known about the conditions and usage of child care for Aboriginal children in Canada. Moreover. because children represent a larger than average proportion of the Aboriginal population, child care is a particularly relevant issue for Aboriginal people.⁷

Using data from the 2006 Aboriginal Children's Survey, this study describes child care⁸ for First Nations children living off reserve, Métis children, and Inuit children in Canada, including the cultural aspects in the care environment. As a first step, a sample of First Nations children living off reserve, Métis, and Inuit children aged 2 to 5 years and not attending school who participated in child care were compared to a similar sample of children not in child care. For those children in care, aspects of

child care of interest included: type of care, regulatory status, total hours in care, and number of care arrangements (i.e., stability). Next, sociodemographic characteristics such as the age and sex of the child, household income, family structure, parental education, parental work status and place of residence were examined in relation to both patterns of child care use and to child outcomes. Finally, cultural activities and Aboriginal language use in child care were investigated to determine associations with child outcomes. For the current study, the effect of child care on hyperactivity and prosocial behaviour were of particular interest as existing research suggests a relationship between child care and both of these outcomes.

Child care options

Across Canada, child care is generally provincially regulated with variability in the number and types of spaces available. Family characteristics, such as income and parental education, may influence the choices and/or availability of child care for children. Moreover, family characteristics have been shown to have significant associations with child outcomes.⁹ For example, results

from the National Institute of Child Health and Development (NICHD) study of early child care suggested that family risk factors such as poor socioeconomic conditions were significantly associated with children's behaviour problems and pro-social behaviours. 10 While there is little information on the association between family circumstances and child care availability or participation for Aboriginal children specifically, similar factors may be important. There are several federally funded initiatives to assist and support early child care programs for Aboriginal people including the First Nations/ Inuit Child Care initiative, funded by Human Resources and Social Development Canada and the Aboriginal Head Start program, supported by Health Canada.

An emerging interest in Aboriginal child care programs which are culturally focused and designed in partnership with community partners has developed. 11 For example, the "Generative Curriculum Model" described by Ball and Pence¹² is a unique approach to child-care training wherein mainstream child care practices are downplayed and a culturally grounded approach to child care is encouraged (e.g., elder involvement in caregiver training and a focus on community-based learning). The result is a community driven, culturally appropriate child care curriculum that can be implemented by trained Aboriginal child-care providers. In addition, programs such as Aboriginal Head Start have specific goals of encouraging Aboriginal culture and language, promoting positive selfimage, and fostering early school readiness. Thus, a focus on cultural activities is particularly relevant when studying Aboriginal child care in Canada.

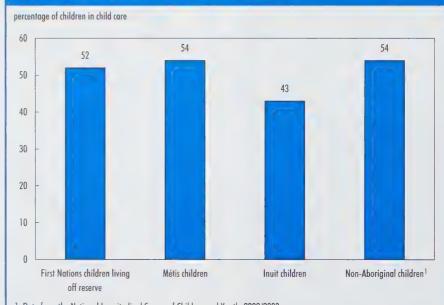
Approximately half of First Nations children living off reserve, Métis children and Inuit children participate in child care

Overall, 52% of First Nations children living off reserve, 54% of Métis children, and 43% of Inuit children were in some type of child care arrangement in 2006 (Chart 1). These results are similar to national data which found that 54% of children in Canada were in some type of childcare arrangement in 2002/2003.¹³ For all three Aboriginal groups, children who lived with a single parent, lived in households with a higher income, had a parent who was working and/or had a parent with higher education were more likely to be in child care. Conversely, First Nations children living off reserve, Métis children and Inuit children who had a parent who was not working or a parent with less than a high school education were less likely to be in child care (Table 1). In addition, Métis

children in care were, on average, older than Métis children not in care.

There were also differences related to the province or region of residence for each of the Aboriginal groups. Among First Nations children living off reserve, those living in Quebec and British Columbia were more likely to participate in child care than not; those living in Manitoba and Alberta were less likely to participate. These provincial differences would be expected due to differences in provincial funding for early child care in Quebec as well as various child care initiatives in British Columbia. 14 Métis children living in Quebec and the territories were more often in child care while Métis children living in Alberta and the Atlantic Provinces were less often in care. Finally, a higher proportion of Inuit children living in Nunatsiavut, Nunavik, and outside Inuit Nunangat were in child care while a lower proportion of those living in Nunavut were in care.





1. Data from the National Longitudinal Survey of Children and Youth, 2002/2003.

Sources: Statistics Canada, Aboriginal Children's Survey, 2006 and the National Longitudinal Survey of Children and Youth, 2002/2003.

Table 1 Proportion of Aboriginal children¹, by select characteristics, 2006

		First Nations children living off reserve		Métis children		children
	In child care	Not in child care†	In child care	Not in child caret	In child care	Not in child care
			average	e in months		
Child's characteristics	00.7	00.4				
Age	39.7	38.6	40.2*	38.2	40.7	42.0
			per	centage		
Sex						
Boy	52.3	47.7	51.9	48.1	38.9*	61.1
Girl	50.8	49.2	56.4	43.6	46.4*	53.6
Household and responding parent's a Family structure	characteristics					
Two parent	49.7*	50.3	51.4*	48.6	40.3*	59.7
Single parent	56.0*	44.0	58.9*	41.1	48.9*	51.1
Responding parent's employment s	tatus					
Full-time	74.1*	25.9	74.7*	25.3	69.6*	30.4
Part-time	66.7*	33.3	66.4*	33.6	51.5	48.5
Not working	34.5*	65.5	30.6*	69.4	19.7*	80.3
Responding parent's education leve		33.0		07.1		00.0
Less than high school diploma	36.9*	63.1	41.7*	58.3	28.6*	71.4
High school diploma	47.4*	52.6	49.3*	50.7	56.6*	43.4
Postsecondary education	65.1*	34.9	63.2*	36.8	66.0*	34.0
				in '000 (\$)	00.0	01.0
Avanua havadald insama	5.4*	4.4	6.2*	5.1	7.8*	5.5
Average household income	3.4	4.4			7.0	5.5
			pero	entage		
Province or region of residence						
Eastern provinces	50.2	49.8	40.8*	59.2	***	***
Quebec	65.0*	35.0	70.7*	29.3 ^E		
Ontario	51.5	48.5	56.4	43.6		
Manitoba	43.8*	56.2	53.6	46.4		
Saskatchewan	48.0	52.0	53.9	46.1		
Alberta	44.9*	55.1	47.9*	52.1	***	
British Columbia	61.9*	38.1	57.1	42.9		
Territories ²	49.6	50.4	65.2*	34.8		
Inuit region (For Inuit only)						
Nunatsiavut		***			54.4*	45.6
Nunavik		***			52.9*	47.1
Nunavut		•••		***	30.9*	69.1
Inuvialuit				***	37.1	62.9
Outside Inuit Nunangat					57.3*	42.7

[†] reterence group

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

^{*} statistically signficant difference from reference group at p < 0.05

^{1.} Children 24 months and over and not attending school.

^{2.} Inuit are included in the Inuit regions only.

Daycare centres are the most common type of child care arrangement

The most common type of child care arrangement¹⁵ for all three groups of Aboriginal children was a daycare centre-46% of First Nations children living off reserve, 44% of Métis children and 59% of Inuit children in care attended a daycare centre (Chart 2). This was followed by care by a non-relative (18% for First Nations children living off reserve, 22% for Métis, 12% of Inuit children) and care by a relative (17% for all three groups). Seventeen percent of offreserve First Nations children, 16% of Métis, and 11% of Inuit children were in a nursery school, a preschool, or a Head Start program as their main child care arrangement. 16 Parents of 69% of First Nations children living off reserve, 68% of Métis children, and 72% of Inuit children attending child care reported that it was licensed care. The majority of children in licensed child care were in a daycare centre, a nursery school, a preschool, or a Head Start program. 17

The care arrangements for the majority of First Nations children living off reserve, Métis, and Inuit children were relatively stable. Most—4 out of 5—children had been in a single type of child care arrangement in the year preceding the survey. The average amount of time in any type of care arrangement was approximately 27 hours per week, which was similar for all three groups.

The majority of child care for Inuit children includes Inuit culture and language

Just over one-quarter (26%) of parents of off-reserve First Nations children reported that the child care arrangement promoted traditional and cultural values and customs, compared to 17% of parents of Métis children, and 67% of parents of Inuit children. Care that included either the exclusive use of Aboriginal language or a mix of Aboriginal and non-Aboriginal languages was reported for 16% of First Nations children living

Chart 2 Daycare is the most common type of child care for Aboriginal children

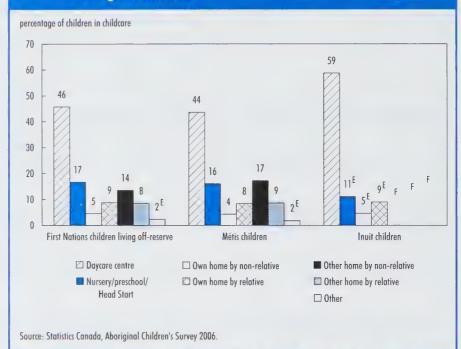


Table 2 Proportion of Aboriginal children in child care that includes traditional activities and Aboriginal languages, by type of care, 2006

	First Nations children living off reserve	Métis children	Invit children
		percentage	
Type of care			
Daycare centre			
Traditional activities	22.5	15.4	72.5
Aboriginal languages ¹	10.1	3.1 E	72.0
Nursery school/preschool	/Head start		
Traditional activities	44.5	34.7	64.8 ^E
Aboriginal languages ¹	32.6	16.9 ^E	65.8 ^E
Own home by non-relativ			
Traditional activities	F	0.0	66.2 ^E
Aboriginal languages ¹	F	0.0	73.4 ^E
Own home by relative			
Traditional activities	34.3	25.5 ^E	76.1
Aboriginal languages ¹	36.6	12.3 ^E	71.1
Other home by non-relati	ive		
Traditional activities	12.9 ^E	F	F
Aboriginal languages ¹	F	F	F
Other home by relative			
Traditional activities	34.4	19.2 ^E	80.8
Aboriginal languages ¹	16.4 ^E	F	69.6

Includes cases where Aboriginal languages are spoken exclusively as well as in combination with non-Aboriginal languages.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

off reserve and 6% of Métis children. The majority (66%) of Inuit children were in care where an Inuit language was used. It was also observed that most child care arrangements for Inuit children that included the Inuit language also included traditional and cultural values and customs (88%), as compared to arrangements that did not include the Inuit language (for which only 27% included traditional and cultural values and customs).

Among the First Nations and Métis groups, the proportion of children participating in traditional and cultural values and customs in their child care environment was highest for children attending a nursery school, a preschool, or a Head Start program (Table 2). This was followed by being cared for by a relative (own home or other home). The pattern was similar for Aboriginal language use in care. For Inuit children in child care, the proportion participating in traditional and cultural values and customs was highest for children cared for by a relative, followed by a daycare centre.

Child care use is associated with child and family factors

An examination of the factors associated with the use of child care for First Nations children living off reserve, Métis children, and Inuit children showed that family structure, parental education and employment, and household income were significant, independent factors for all three Aboriginal groups (Table 3). Specifically, living with a single parent (versus two), living with a parent who was working (either full- or part-time) and living in a household with a higher income were all associated with being in child care.

For First Nations children living off reserve, children living with a parent with less than a high school education were less likely to be in care, whereas children living with a parent with more than a high school education were more likely to be in child care. Parental education was also important for Métis and

Table 3 Odds ratios of Aboriginal children being in child care, by group

	First Nations children living off reserve	Métis children	Invit childrer
		odds ratio	
Sex			
Boy	1.09	0.92	0.68*
Girlt	1.00	1.00	1.00
Age (in years)	1.03	1.20*	0.86
Family structure	0.05*	0.4/*	0.00*
Single parent	2.25*	3.46*	2.32*
Two parents†	1.00	1.00	1.00
Responding parent's education	on level		
Less than high school diploma	0.67*	0.83	0.41*
High school diplomat	1.00	1.00	1.00
Postsecondary education	1.63*	1.51*	0.96
Responding parent's employe	ment status		
Full-time	4.91*	7.35*	6.79*
Part-time	3.83*	4.94*	4.51*
No employment†	1.00	1.00	1.00
Income (adjusted for househouse, divided by 10,000)	1.15*	1.17*	1.21*

reference group

Note: Geographic variables (province, population density) included as control variables but not shown.

Source: Statistics Canada, Aboriginal Children's Survey, 2006.

Inuit children; Métis children whose parent had more than a high school education had greater odds of being in child care, and Inuit children with a parent with less than a high school education were less likely to be in child care. In addition, for Métis children only, older child age was associated with increased odds of being in child care. Inuit boys were found to be less likely than girls to attend child care. Similar child and family predictors such as parental education and household income were found to be associated with specific types of care including daycare centres or licensed care (versus no care, data not shown).

Aboriginal culture and traditions in child care have a positive influence on Inuit and off-reserve First Nations children

Research has shown that there are positive impacts for Aboriginal children who learn about, or take part in, cultural activities. 18 In the context of child care, it was of interest to examine whether cultural aspects of child care were associated with First Nations children living off reserve, Métis, and Inuit children's parent-reported outcomes, in particular, hyperactivity and prosocial behaviours. Results indicate that being in any type of child care was significantly associated with greater pro-social behaviour for First Nations children living off reserve; however, this association was not significant after the control variables, including the child's sex and age, family structure, parent

 $^{^{*}}$ statistically significant difference from reference group at p < 0.05

What you should know about this study

The Aboriginal Children's Survey (ACS) was developed by Statistics Canada and Aboriginal advisors from across the country to assess the early development of Aboriginal children (ages 0 to 5 years) and the social and living conditions in which they are learning and growing. The survey was conducted jointly by Statistics Canada and Human Resources and Social Development Canada in 2006. The ACS target population was First Nations children living off reserve, Métis children, and Inuit children living in the provinces as well as all Aboriginal children living in the three territories. The sample was selected from 2006 Census of Canada respondents who reported Aboriginal ancestry; and/or identified as North American Indian and/or Métis and/or Inuit; and/or had treaty or registered Indian status; and/or had Indian Band membership. In the current study, those individuals who reported Aboriginal identity were included. Children with both single and multiple identities were included. For example, Inuit children were those who had Inuit identity and those who had Inuit identity combined with First Nations or Métis identity. In addition, children who were attending school were excluded, and the dependent variables of interest were only collected for children aged 2 to 5 years. Thus, the total sample size for the current study was 4,666 children (2,216 First Nations children living off reserve, 1,630 Métis children and 863 Inuit children, non-independent samples due to multiple identity groups).

Some limitations should be noted. First, parent-reported child care as described here represents the main type of care only; this may conceal any other child care arrangements in which the child spends less time. However, in this study, the majority of children were reported to participate in only one type of care arrangement (79% of First Nations children living off reserve, 81% of Métis, and 87% of Inuit). Second, although Aboriginal Head Start was included on the ACS as a type of child care, some parents may not perceive Head Start as their main type of care or may not describe Head Start as a child care setting (but rather as a cultural or educational program), which might underestimate its frequency in the ACS.²

One of the most important aspects of the child care environment—quality of care—is not included in this study. In studies of non-Aboriginal children, quality of care (assessed in terms of developmentally appropriate stimulating activities delivered by people with training in early childhood education) has been shown to be one of the strongest predictors of positive child outcomes. While the Aboriginal Children's Survey did not collect such information, this may be an area for future work. Another caveat is that the statistical associations reported in this study are correlational (taken at one point in time) and thus causal conclusions cannot be made between participation in child care and Aboriginal children's outcomes. In addition, both hyperactivity and pro-social behaviour were reported by the parent; future research might consider the inclusion of other outcomes, including those reported by caregivers, teachers, or others.

Finally, for First Nations children, the ACS collected data from those living off reserve only. However, the findings can be compared with results from the Assembly of First Nation's Regional Health Survey (RHS) which included those living on reserve.³ The RHS found that 44% of First Nations children under age 6 living on reserve were in some type of child care arrangement, with more than half being cared for by a relative (59%), 31% being cared for in a formal setting (e.g., a daycare centre), and 5% in a home setting by a nonrelative. The RHS also found that First Nations children living on reserve whose parents had higher education were more likely to be in child care. Some of the differences in the type of child care use between the ACS and the RHS may be due to a time lag between years in which the data were collected (RHS in 2002/2003, ACS in 2006) or may reflect differences in the circumstances of First Nations children living on and off-reserve.

Definitions of terms and concepts

Sociodemographic characteristics: The person most knowledgeable of the child (a biological parent for 90% of First Nations children living off reserve, 94% of Métis children, and 81% of Inuit children) reported the child's gender, age (in months), and the child's Aboriginal identity (First Nations, Métis, or Inuit). Children's living arrangements were classified as dual parent if they were living with two biological, adoptive, or step-parents; single-parent status included biological or non-biological mother or father. Total household income was obtained from the 2006 Census of Canada. Parental education was categorized as less than high school diploma, high school diploma, or postsecondary education. For parental employment, the parent reported whether they were working,

What you should know about this study (continued)

and if so, if the employment was full-time, full-time seasonal. part-time, or part-time seasonal. Two variables were created to reflect full-time (includes seasonal) or part-time employment. Child care: Aspects of child care included: main type of care, regulatory status (licensed/not licensed), number of hours in the main type of care, and the total number of care arrangements (one, two, three or more). Parents were asked "At which type of child care does (child) spend the most hours per week?" This question was asked for all children who were reported to be in child care, regardless of the reasons for care (i.e., not necessarily because the parent was working or at school). Response options for main type of care included: daycare centre; nursery school/preschool; Aboriginal Head Start program; non-Aboriginal Head Start program; own home, non-relative; own home, relative; other home, non-relative; other home, relative. These categories were combined to create seven possible arrangements: daycare centre; nursery school, preschool or Head Start (Aboriginal or non-Aboriginal)⁴; relative (own home or other home), non-relative (own home or other home); or other. Daycare centre was used as the reference category in the regression analyses.

The parent was also asked to report on some of the cultural aspects of their child's care arrangement. In particular, the parent reported whether or not the child's main child care arrangement promoted First Nations, Métis or Inuit traditional and cultural values and customs (yes/no). In addition, they were asked to report all of the languages spoken in the main child care arrangement, including English, French, Inuktitut, Cree, and Ojibway. Due to small sample sizes for some of the languages by group, information was collapsed to reflect whether or not the child was spoken to in any Aboriginal language while in care (versus none).

Child behaviour: Information on children's behavioural outcomes was collected using the Strengths and Difficulties Questionnaire (SDQ). The original SDQ was designed to assess children's social and emotional behaviour. The child's parent or guardian responded to 25 questions about the child's behaviour and emotions on a three-point Likert scale using the responses "not true," "somewhat true" or "certainly true." Previous work with the ACS has shown that an alternative factor structure of the SDQ items on the ACS demonstrated validity for First Nations children living off reserve, Métis

children, and Inuit children.⁶ Two subscales were considered: hyperactivity and pro-social behaviour. Sample items of the hyperactivity scale include: easily distracted, concentration wanders, and constantly fidgeting or squirming. For the pro-social scale, sample items include: considerate of other people's feelings, shares readily with other children, and helpful if someone is hurt, upset or feeling ill.

Data analysis

As a first step, descriptive analyses were performed to provide information on the study sample and aspects of child care. Subsequently, significance tests were performed to determine any differences in sociodemographic factors between children who were in child care versus those who were not in care. Logistic regressions were also performed to determine independent predictors of child care use among those who were in child care (for the three Aboriginal groups separately). The predictors included: child sex and age, family structure, parental education, full- and part-time employment, and household income. Finally, in order to determine the individual factors that were significantly associated with parental-reported child functioning (hyperactivity and prosocial behaviour), linear regressions were performed to determine the association with aspects of child care, including opportunities for traditional and cultural values and customs, and Aboriginal language use in care, on hyperactivity and pro-social behaviours (both unadjusted and adjusted for sociodemographic characteristics and for other aspects of child care including type of care, hours in care, and number of care arrangements). Normalized sampling weights were applied to render the analyses representative of each of the three Aboriginal groups in Canada. Bootstrap weights were applied to account for the underestimation of standard errors due to the complex survey design. 7 Statistical significance was accepted at the p < 0.05 level.

- 1. Children were identified as "North American Indian"; however, the term "First Nations" is used throughout this report.
- Information on the proportion of Aboriginal children living off reserve served by the Head Start program from the literature was not located.
- 3. Assembly of First Nations. 2007. First Nations Regional Longitudinal Health Survey (02/03). Ottawa, Ontario, Assembly of First Nations/ First Information Governance Committee.
- Due to small sample size and difficulties with collection, Head Start could not be examined as a separate type of child care setting.

What you should know about this study (continued)

- 5 Goodman, Robert. 1997. "The Strengths and Difficulties Questionnaire: A research note". *Journal of Child Psychology and Psychiatry*, Vol. 38, no. 5 p. 581-586.
- Oliver, Lisa, Leanne C. Findlay, Cameron McIntosh, and Dafna E. Kohen. 2009. Aboriginal Children's Survey, 2006: Evaluation of the Strengths and Difficulties Questionnaire. Statistics Canada Catalogue no. 89-634-X2009008.
- Rust, K. F. and J.N.K. Rao. 1996. "Variance estimation for complex surveys using replication techniques". Statistical Methods in Medical Research. Vol. 5, no. 3, p. 281-310.

work status and education, and household income, were taken into consideration (data not shown). For Métis or Inuit children who participated in care, their hyperactive or pro-social behaviours did not differ from Métis or Inuit children who did not participate.

In models examining the effects of traditional and cultural values and customs and Aboriginal language use in child care, participation in traditional activities was positively associated with pro-social behaviours for First Nations children living off reserve. That is, First Nations children living off reserve who engaged in traditional and cultural activities and customs in child care arrangements were rated by their parents as being more prosocial than children whose child care arrangements did not include traditional activities. This effect remained significant after controlling for sociodemographic characteristics (e.g., parental education and employment, household income) and other aspects of child care previously shown to be associated with child functioning, including the type of child care, total hours in care, and the total number of care arrangements. 19 For Métis children, although those who were in child care environments that included traditional and cultural values and customs were found to be more hyperactive, this effect did not remain once family sociodemographic characteristics and other aspects of child care were considered. This suggests that for Métis children, traditional activities are not significantly related to hyperactivity in the context of family income and other care factors. For Inuit children, speaking the Inuit language in child care was associated with greater pro-social behaviour, which remained significant in the model that was adjusted for family sociodemographic factors and child care factors (data not shown).

Summary

In 2006, approximately one-half of First Nations children living off reserve, Métis children, and Inuit children aged 2 to 5 and not in school were in some type of child care, with the most common type of child care arrangement being a daycare centre. Interestingly, approximately 2 out of 3 children were reported by parents to be in regulated (licensed) care compared to approximately onethird of non-Aboriginal Canadian children.²⁰ Differences in Aboriginal child care use were found based on family structure, parental education, parental work status, and household income for all three Aboriginal groups. It is likely that factors such as family structure, education, and income impact both the availability and affordability of child care options for Aboriginal families and employment situations may necessitate the use of child care.

Many of the child care arrangements for First Nations children living off reserve, Métis children and Inuit children included some

Aboriginal cultural content, be that through traditional and cultural values and customs or the use of an Aboriginal language in the child care environment. For example, the majority of Inuit children in care were reported to attend a child care arrangement that promoted traditional Inuit cultural values and customs (67%) and used an Inuit language (66%).

Although participation in child care was not found to be independently associated with hyperactivity or pro-social behaviours, this study demonstrates that traditional and cultural values and customs and Aboriginal language within the child care environment can have positive influences on young First Nations, Métis, and Inuit children's outcomes. In particular, for First Nations children living off reserve, participation in traditional and cultural values and customs in care was positively associated with pro-social behaviours even after family sociodemographic characteristics and other aspects of child were considered. For Inuit children, speaking the Inuit language in care was associated with greater pro-social behaviours, suggesting that language in care is particularly relevant for Inuit children's social behaviours.



Leanne C. Findlay is an analyst and **Dafna E. Kohen** is a senior analyst in the Health Analysis Division of Statistics Canada.

- Bushnik, Tracey. 2006. Child care in Canada, Children and Youth Research Paper Series. Statistics Canada Catalogue no. 89-5999-MIE – no. 003.
- 2. Bradley, Robert H. and Deborah Lowe Vandell. 2007. "Child care and the wellbeing of children." Archives of Pediatric Adolescent Medicine. Vol. 161, no. 7. p. 669-676.
- National Institute of Child Health and Development (NICHD) Early Child Care Research Network. 1999. "Child outcomes when child care center classes meet recommended standards for quality." American Journal of Public Health, Vol. 89, no. 7. p. 1072-1077.
- 4. Romano, Elisa, Dafna E. Kohen and Leanne C. Findlay. 2010. "Associations among child care, family and behavior outcomes in a nation-wide sample of pre-school aged children." International Journal of Behavioral Development OnlineFirst. p. 1-14.
- Assembly of First Nations. 2005. First Nations Early Learning and Child Care Action Plan
- 6. Ball, Jessica. 2002. "The challenge of creating an optimal learning environment in child care: Cross-cultural perspectives." Enhancing Caregiver Language Facilitation in Child Care Settings. Toronto. Symposium of the Canadian Language and Literacy Research Network.
- 7. Beach, Jane, Martha Friendly, Carolyn Ferns, Nina Prabhu and Barry Forer. 2009. Early childhood education and care in Canada 2008. 8th edition. Childcare resource and research unit. 216 p.

- 8. Child care arrangements refer to the care of a child by someone other than a parent, including daycare, nursery or preschool, Head Start, and care by a relative or other caregiver. These refer to regular arrangements that are used consistently rather than sporadically (e.g., babysitting). These data refer to the main child care arrangement, that is, the arrangement in which the child spends the most time.
- NICHD Early Child Care Research Network. 2001. "Nonmaternal care and family factors in early development: An overview of the NICHD Study of Early Child Care." Journal of Applied Developmental Psychology. Vol. 22, issue 5. p. 457-492.
- 10. NICHD Early Child Care Research Network. 2000. "The interaction of child care and family risk in relation to child development at 24 and 36 months." Applied Developmental Science. Vol. 6, issue 3. p. 144-156.
- Doherty, Gillian, Martha Friendly and Jane Beach. 2009. OECD Thematic Review of Early Childhood Education and Care: Canadian background report.
- 12. Ball, Jessica and Alan Pence. 2001.
 "A 'Generative Curriculum Model' for
 Supporting Child Care and Development
 Programs in First Nations Communities."
 Journal of Speech-Language Pathology and
 Audiology. Vol. 25, no. 2. p. 114-124.
- 13. Bushnik, Tracey. 2006.
- 14. Beach et al. 2009.

- 15. The most common child care arrangement refers to those children aged 2 and over, in non-parental child care and not in school.
- Due to small sample size and difficulties with collection, participation in Head Start programs could not be examined separately.
- 17. Of First Nations children who attended licensed care, 64% reported being in a daycare centre and 23% in a nursery/ preschool/Head Start program. For Métis children in licensed care, 60% were in a daycare centre and 23% in a nursery/ preschool/Head Start program. Among Inuit children in licensed care, 81% were in a daycare centre and 13% in a nursery/ preschool/Head Start program.
- 18. Ball, Jessica. 2005. "Early childhood care and development programs as hook and hub for inter-sectoral service delivery in First Nations communities." Journal of Aboriginal Health. Vol. 2, issue 1. p. 36-53.
- 19. For First Nations and Métis children, being cared for by a relative (own home, other home, respectively, as compared to a daycare centre) was associated with higher parent-reported hyperactivity. Being cared for by a non-relative was associated with greater pro-social behaviour for Métis. For Inuit, participating in any type of care (except own-home, relative) was associated with lower parent ratings of hyperactivity (as compared to a daycare centre).
- 20. Romano et al. 2010.

Work from a different perspective!



Get insight into what Canadians do for a living and how much they earn with *Perspectives on Labour and Income*

What's inside

Perspectives delivers the latest research and data on Canadian labour and income issues. Inside every issue you'll find vital data, timely articles and studies on such important topics as:

- earnings and income in Canada
- □ savings and spending patterns
- □ work-life balance issues
- ☐ the aging of the labour force
- ☐ regional employment trends
- □ self-employment patterns
- ☐ technological changes affecting the workplace
- ...and many other relevant topics!

Some describe *Perspectives on Labour and Income* as a scholarly journal, others liken it to a popular magazine. But, all agree *Perspectives* is a must read for decision-makers who want to stay on top of labour market trends.

Don't miss a single issue

Activate your risk-free subscription TODAY! Choose *Perspectives* monthly in PDF or HTML format or quarterly in print format. If at any time you decide to cancel, you'll receive a complete refund on all undelivered issues. Guaranteed!

Printed issue: Published quarterly

1-year subscription: \$63.00

2-year subscription: \$100.80 (Save 20%) 3-year subscription: \$132.30 (Save 30%)

Free* downloadable HTML or PDF file: Issued monthly

(*Note: You can view HTML or PDF issues via Internet only. Visit the Statistics Canada website at www.statcan.ca/english/ads/75-001-XIE/order 2001.htm)

How to order - Printed issue

CALL toll-free 1 800 267-6677 FAX toll-free 1 877 287-4369 E-MAIL infostats@statcan.ca

MAIL Statistics Canada, Finance, 6-H, R.H. Coats Building, Tunney's Pasture,

Ottawa, Ontario K1A 0T6

Print format: In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. For shipments to the United States, please add \$6 per issue. For shipments to other countries, please add \$10 per issue. Federal government clients must indicate their IS Organization Code and IS Reference Code on all orders.

Living with disability series

Help with activities of daily living for people with a disability

by Patric Fournier-Savard, Chantal Mongeon and Susan Crompton

Introduction

Canada has a large and growing population of people with disabilities. How many of them need help with the day-to-day tasks of daily life, such as running errands, doing everyday housework, or personal care? Where do they get the help they need? And how do the people who provide that help share the responsibility as a person's disability becomes more severe?

Although the issue of the care obtained by older people has been extensively studied, researchers have less often examined the care received by people with a disability. This presents a gap in knowledge about caregiving since findings about eldercare cannot be generalized to the disabled population, because, among other things, almost 60% of people with disabilities are under 65.

Studies that focus on the disabled population confirm the importance of the family as the primary caregiver; they particularly underline that this role fluctuates according to the tasks with which an individual requires assistance. They also corroborate that the help provided by the family grows as the severity of the disability increases.^{2,3}

However, little is known about the extent to which family members may share the caregiver role, and how the necessary tasks are distributed among different caregivers.

This article uses the 2006 Participation and Activity Limitation Survey to shed light on these issues. It examines how many people with disabilities receive help with activities of daily living, the type of daily activities with which they get help, and their relationship to the person or persons who provide help with specific tasks. Then, it explores how these relationships change as the severity of the disability increases.

It is important to note that the activities of daily living (ADLs) discussed here include tasks that exceed basic care or simple physical needs. ADLs encompass all those activities which facilitate active engagement in everyday life for a person with disabilities. At first glance, these tasks may seem inconsequential, but being able to accomplish them contributes greatly to a person's quality of life (see "What you should know about this study").

Getting enough help to meet the demands of daily life

Making sure that people with disabilities receive the help they need can be an important determinant of their social and economic participation. Of course, some do not need any help, and others require a minimal amount of assistance.

In 2006, one-third of people with disabilities reported that they did not need any help to perform the activities of daily living (ADL). More than one-third said they received all the help they needed; one-quarter would have liked to have had more help than they were getting; and 5% reported that even though they needed help, they did not receive any at all (Chart 1).

As the severity of a person's disability increased, their demand for help increased as well: 95% of people with very severe limitations needed at least some care, compared to 40% of those with mild disabilities. At the same time, it also became more difficult to get as much help as they needed; the large majority of people with a mild disability who needed help said they had enough care, but less than half of those with a very severe limitation reported that they received sufficient help (Chart 1).

What you should know about this study

This article draws on data from the 2006 Participation and Activity Limitation Survey (PALS). Respondents were classified as having a disability if they reported that they had difficulties with daily living activities, or that a physical or mental condition or health problem reduced the kind or amount of activities they could do. The answers to the disability questions are self-reported and therefore represent the respondent's perception of his or her situation.1

The main study population consists of about 13,100 respondents—representing about 2.4 million Canadians aged 15 and over with a disability—who received care with at least one activity of daily living (ADL). PALS asked each respondent to identify their relationship to their caregivers as well as the ADL with which they received help from each caregiver. Data were collected on a maximum of three caregivers, although some people may have had additional caregivers.

Definition of terms

Care receiver: A person aged 15 and over with a disability who received help with at least one activity of daily living (ADL).

Severity of disability: PALS constructed a scale measuring the overall severity of disability according to the intensity and frequency of the activity limitations reported by respondents. The disability severity scale is divided into four levels: mild, moderate, severe and very severe.

Activity of daily living (ADL): Respondents were asked the following nine questions:

Because of your condition do you usually receive help with:

- preparing meals?
- everyday housework, such as dusting and tidying up?
- · heavy household chores, such as spring cleaning or yard work?
- getting to appointments and running errands, such as shopping for groceries or other essential items?
- · looking after your personal finances, such as making bank transactions or paying bills?
- childcare?
- personal care, such as washing, dressing or taking medication?
- specialized nursing care or medical treatment at home such as injections, therapy, blood or urine testing or catheter care?
- moving about inside your residence?

If respondents replied "Yes" to any one of these questions, they were classified as receiving care with activities of daily living.

Although persons receiving help with childcare constitute part of the study population of care receivers, this study does not discuss childcare as a separate topic because the relevant population is too small (2% of all care receivers) to provide reliable detailed estimates.

Caregiver: A person who usually helped the respondent with activities of daily living. Respondents identified a maximum of three caregivers and the ADL(s) with which they assisted the respondent.

Sources of care: Care receivers obtained help from four types of sources, depending on their relationship to the person or persons providing the care:

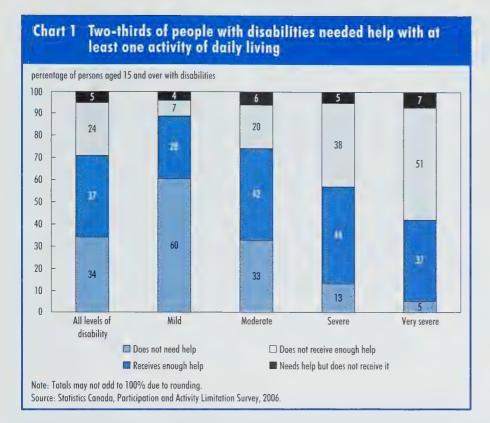
Immediate family only/family only: spouse or partner (including same-sex partner), daughter, son, mother, father, sister, brother. Whether the care receiver had one, two or three main caregivers, they were all members of the immediate

Friends and extended family only/friends only: Close friend, neighbour, work colleague, grandchild, grandparent, daughter-/son-in-law, mother-/father-in-law, sister-/brotherin-law, niece, nephew, aunt, uncle, cousin, former spouse or partner, other persons not associated with an organization. Whether the care receiver had one, two or three main caregivers, they were all friends or extended family.

Paid help only: Non-governmental organization, governmental (all levels), and paid employee of the care receiver. Whether the care receiver had one, two or three main caregivers, they were all paid helpers.

Immediate family and others: Care is received from two or three different sources. For example, a person getting help with meals from his daughter and from Meals-on-Wheels would be receiving care from immediate family and others, as would a person receiving personal care from her mother, a neighbour and a paid homecare worker. About 90% of the care obtained from this source includes some involvement from the immediate family.

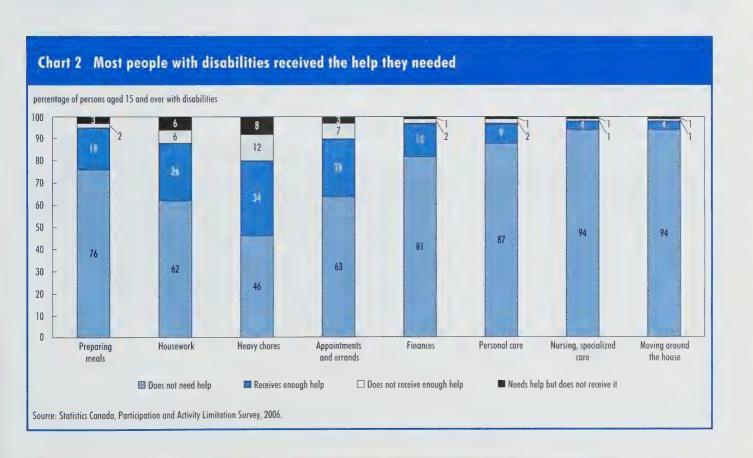
For more detailed information about the concepts and definitions used by PALS, see MacKenzie, Hurst and Crompton, "Defining disability in the Participation and Activity Limitation Survey," Canadian Social Trends No. 88 (Winter 2009).



Different ADLs can make different demands of the caregiver in terms of the skills required to do the tasks and/or the frequency with which a task must be performed. As such, it is not surprising that people's assessment of the help they received varied considerably depending on the task. For example, 24% of persons with disabilities wanted help4 preparing meals; of these, 8 in 10 felt that they got as much as they needed. In contrast, 6% of the disabled population wanted assistance to move around the house, but only twothirds of these people reported that they received enough help (Chart 2).

Accessing different sources of care

Over 9 in 10 Canadians with disabilities who said they needed help with their daily tasks (more than 2.4 million people) regularly received assistance with at least one ADL. On average, these care receivers got help with about three activities of daily



living, although the actual number of ADLs was strongly correlated to the severity of their disability. Over three-quarters of people with mild limitations received assistance with only one or two activities, while two-thirds of those with very severe disabilities had help with four or more (data not shown).

The principal source of help for people needing support with daily activities was their immediate family. Eighty percent of care receivers obtained at least some care from a spouse, child, parent or sibling (Table 1).

The sources of care expanded as the number of tasks multiplied. When the number of ADLs rose from one to four or more, the proportion of care receivers getting at least some help from friends and extended family increased from 27% to 32%; and the

proportion sourcing at least some support from paid helpers⁶ almost doubled, from about 17% to 30% (Table 1).

Yet even when the care receiver drew on a mix of sources for their care, the family maintained its primary role. The more ADLs that a person received help with, the more likely it was that they were getting at least some of that help from a spouse or other close family member.

Sources of care for different activities of daily living

The source of care is likely to depend not only on the number of ADLs with which a care receiver needs help, but also the type of activity. The care receiver may need to have injections or to be monitored doing physiotherapy exercises; on the other hand, they might need help only with routine daily tasks like meal preparation or housework. Clearly, a different set of competencies, skills or proximity to the care receiver is required to meet these distinct needs.

The PALS data show that, regardless of the severity of the disability or the type of help required, most care receivers identified immediate family as their main source of care; in a large number of cases, the immediate family was the only source of care. The sole exception was help with nursing and specialized treatment, most of which was received from paid help. Friends and extended family were most often accessed to help with heavy chores, and with going to appointments or running errands, but even for these activities, they did not provide as much assistance as immediate family (Table A.1).

Table 1 Source of care by number of activities of daily living for persons with disabilities aged 15 and over receiving care with at least one activity, 2006

	Number of ADLs ¹ with which a person received help						
	One †	Two	Three	Four to nine	Total		
Source of care	percentage of care receivers						
All care involving immediate family	72	75	85*	89*	80		
Immediate family only	57	49*	56	49*	53		
Immediate family with friends and extended family	11	17*	19*	19*	16		
Immediate family with paid help	3	8*	8*	14*	8		
Immediate family with friends, extended family and paid help	F	2 ^E	2 ^E	8	3		
Friends and extended family only Friends and extended family with paid help	14 F	9* 3 ^E	6* ^E F	3* 3 ^E	8 3		
Paid help only	13	13	4* ^E	5*	9		

[†] reference group

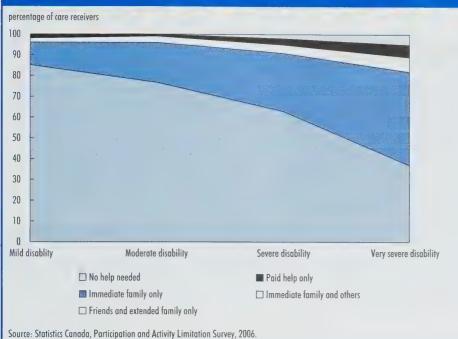
Note: Totals may not add to 100% due to rounding.

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

 $^{^*}$ statistically significant difference from reference group (one ADL) at p < 0.05

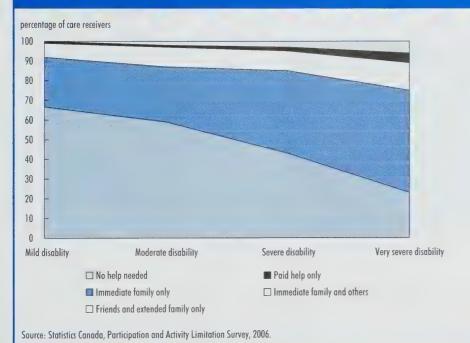
^{1.} Activities of daily living.

Chart 3 Almost all help received with preparing meals comes from immediate family



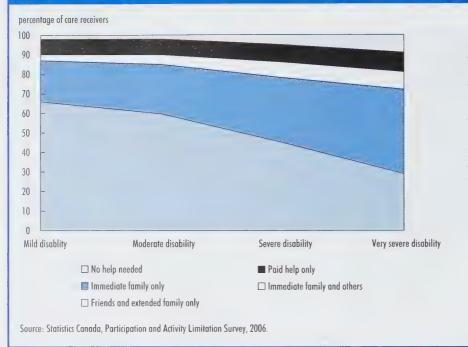
Just over one-third of all care receivers got help preparing meals, and most had help every day (Table 2). Demand for assistance rose as the severity of disability increased (Chart 3), but the most important source of care remained the immediate family.

Chart 4 Help going to appointments or running errands is received from friends as well as close family



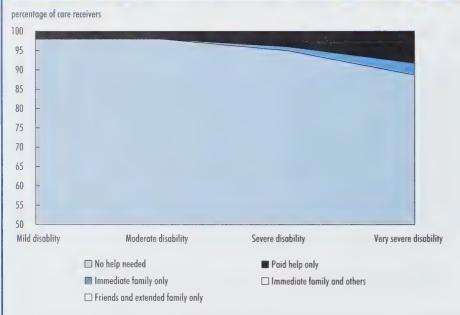
About half of all care receivers had someone's help to get to appointments or do errands, although help received increased as the severity of the disability intensified (Chart 4). Irrespective of the severity of the disability, one in five care receivers got help with this task from friends and extended family (Table A.1).

Chart 5 Care receivers getting help with regular housework often looked to sources of care outside the family



Half of all care receivers obtained assistance to do their everyday housework (Table 2); people with very severe limitations were twice as likely to get help as those with mild disabilities (Chart 5). Paid help and friends and extended family were the sources of care for almost one-third of people who received help with this ADL.

Chart 6 The majority of care receivers sourced nursing care or specialized treatment from paid caregivers



Only 6% of care receivers, most of them with severe or very severe disabilities, obtained nursing care or specialized treatments (Chart 6). About two-thirds of people getting help with this ADL received it only from paid helpers.

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006

Frequency of care received

The frequency with which care is provided is an important dimension of caregiving. Information about the frequency of care can help address issues related to the intensity or volume of the assistance needed by the care receiver as well as enriching understanding of the network of care upon which persons with disabilities rely.

For example, although the proportion of care receivers who cited friends as primary caregivers was much lower compared to immediate family, the frequency with which they gave help was similar to that of immediate family. This was the case for most ADLs except routine housework and heavy chores. For instance, only 4% of care receivers got help with meals from friends and extended family, compared to 25% from immediate family. However, three-quarters of help from friends was received every day, the same frequency of care obtained from immediate family (Table 2).

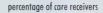
The frequency of caregiving was somewhat different when paid helpers were the source of care. For most ADLs, care receivers showed little reliance on paid helpers. Nursing care was most likely to be received from paid helpers, but they rarely provided it every day (Table 2).

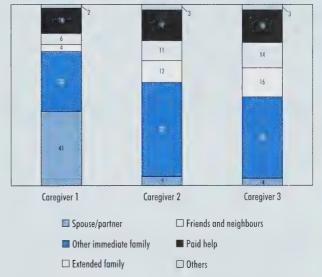
How many caregivers?

PALS collected data on the assistance received from the three caregivers who usually provided help with a given activity of daily living (ADL). Forty-three percent of care receivers reported that they had one main caregiver, 28% named two and 29% named three caregivers. Of course, the number of caregivers generally grew as the level of disability increased: care receivers with very severe limitations were over twice as likely to have three caregivers (42% versus 18% for those with mild disabilities).

As a care receiver acquired more caregivers, the nature of his or her relationship to the people providing help changed. As immediate family members were increasingly spoken for, friends, neighbours and extended family accepted more responsibility. For example, immediate family made up 75% of caregiver one, 57% of caregiver two, and 49% of caregiver 3. In contrast, friends and extended family accounted for 10% of primary caregiver one, 23% of primary caregiver two and 30% of primary caregiver three.

Regardless of whether there is one, two or three caregivers, family always plays an important role





Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

Table 2 Sources of care for individual activities of daily living, by frequency of assistance, 2006

Activity of daily living	D til	Frequency of assistance				
	Persons with a disability who received help	Daily	At least weekly par semaine	Less than weekly fois par semaine		
		percentage				
Meal preparation						
All sources of care	34	78	20	3		
Immediate family †	25	78	19	3 ^E		
Friends, extended family	4*	75	23	F		
Paid help	3*	73	23 ^E	F		
Immediate family and others	2*	84	15 ^E	F		
Housework						
All sources of care	50	52	35	14		
Immediate family †	30	64	31	5		
Friends, extended family	7*	46*	37	16*		
Paid help	9*	16*	43*	41*		
	7 5*	49*	39	13*E		
Immediate family and others	2	47	37	10 -		
Appointments and errands		• /	4.5	40		
All sources of care	52	16	41	43		
Immediate family †	37	16	41	43		
Friends, extended family	10*	15	43	41		
Paid help	2*	23 ^E	23*	54		
Immediate family and others	3*	13 ^E	41	46		
Nursing and specialized care						
All sources of care	6	31	32	38		
Immediate family †	Į €	56	22 ^E	22 ^E		
Friends, extended family	1 ^E	58 [€]	F	F		
Paid help	4*	16* ^E	39	45*		
Immediate family and others	1 €	50₹	F	F		
Personal care						
All sources of care	17	59	27	14		
Immediate family †	9	67	23	10		
Friends, extended family	2*	58	22 ^E	20 [£]		
Paid help	4*	39*	37*	24*		
Immediate family and others	2*	58	32 [£]	F		
miniculate family and offices	L	30	02	·		
		At least weekly	At least monthly	Less than monthly		
Personal finances						
All sources of care	26	52	40	8		
Immediate family †	22	54	39	7		
Friends, extended family	2*	44	48	F		
Paid help] * E	36 ^E	33 ^E	F		
Immediate family and others] *E	40 ^E	55 ^E	F		
Heavy chores						
All sources of care	70	60	24	17		
Immediate family †	45	66	22	11		
Friends, extended family	15*	51*	26	23*		
Paid help	8*	34*	29	37*		
Immediate family and others	4*	63	18	19*		
tininodialo lanniy and omors	1	30	10	1 /		

t reference group

Note: Data were not collected on the frequency with which the receiver got help in moving around the house. Totals might not add to 100 due to rounding. Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

statistically significant difference from reference group (immediate family) at p < 0.05

Summary

People with disabilities who received help with activities of daily living (ADLs) most often identified an immediate family member as their primary caregiver. However, the majority of care receivers relied on more than one source of care to accomplish all the tasks with which they needed help, as the severity of their disability increased.

Help with certain ADLs was received almost exclusively from immediate family. This was particularly the case for personal finances, meal preparation, and moving around the home, where the family remained most closely involved.

But as people received more care for ADLs, the help they obtained increasingly came from outside the immediate family, as friends, neighbours, extended family and paid helpers took on a larger caregiving role.

In general, friends and extended family came forward when the care receiver needed help to go to appointments and run errands, with general housework, and heavy household chores. Paid helpers tended to be a source of care when the care receiver required assistance with personal care and nursing or specialized treatment.

Frequency of care giving adds an important dimension to the understanding of care giving. The 2006 PALS data show that while friends and extended family were less likely to provide care than immediate family, the care they did provide was given just as frequently as family. Conversely, paid caregivers were least often called upon by care receivers, and provided care less frequently than any other source.



Patric Fournier-Savard is an analyst and Chantal Mongeon is a statistical officer with Health Statistics Division; Susan Crompton is a senior analyst with Social and Aboriginal Statistics Division at Statistics Canada.

- In 2006, 4.4 million Canadians aged 15 and over identified themselves as having a disability, an increase of three-quarters of a million people since 2001.
- Fawcett, G., C. Ciceri, S. Tsoukalas and A. Gibson-Kierstead. 2004. Supports and Services for Adults and Children aged 5-14 with Disabilities in Canada: An analysis of data on needs and gaps. Ottawa: Canadian Council on Social Development. http://www.socialunion. gc.ca/pwd/_GAPS_Report_Eng_rev.pdf (accessed September 22, 1010)
- 3. Statistics Canada. 2003. Disability supports in Canada, 2001. Statistics Canada Catalogue no. 89-850-XIE. http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=89-580-X&lang=eng (accessed September 22, 2010)
- Wanted help includes categories: received enough help; did not receive enough help; and needs help but does not receive it.
- 5. Some help from friends and extended family includes the following categories: immediate family with friends and extended family; immediate family with friends, extended family and paid help; friends and extended family with paid help.
- 6. Some support from paid helpers includes categories: immediate family with paid help; immediate family with friends, extended family and paid help; friends and extended family with paid help; and paid help only.

Table A.1 Sources of care for individual activities of daily living, by severity of disability, 2006

ctivity of daily living	Persons with a	Of these, proportion receiving care by level of disability						
	disability who received help	Mild †	Moderate	Severe	Very sever			
	percentage							
Meal preparation								
Immediate family	25	76	80	75	71			
Friends, extended family	4	11 ^E	11 ^E	11	11			
Paid help	3	11 E	7 ^E	7	10			
Immediate family and others	2	F	F	6 ^E	7			
Housework								
Immediate family	30	60	62	59	61			
Friends, extended family	7	10	14	14	13			
Paid help	9	23	19	17	14			
Immediate family and others	5	6 E	6	10	13			
Appointments and errands								
Immediate family	37	75	69	73	67			
Friends, extended family	10	20€	24	17	19			
Paid help	2	3 €	3€	4 E	6 ^E			
Immediate family and others	3	F	4 ^E	5	8 E			
Nursing and specialized care	· · · · · · · · · · · · · · · · · · ·		·					
Immediate family	1	F	F	10 ^E	23 ^E			
Friends, extended family	1	F	F	F	F			
Paid help	4	75	52 ^E	62	60			
Immediate family and others	1	, 5 F	F	F	F			
Personal care	1	-		'				
Immediate family	9	64	62	57	51			
·	2	64 F	02	10 [£]	13			
Friends, extended family Paid help		Г	23 ^E	22	20			
· ·	4	r	73° F	11 ^E	16			
Immediate family and others Personal finances	2	f	r	11.	10			
	0.0	0.0	0.1	0.0	0.0			
Immediate family	22	89	81	83	83			
Friends, extended family	2	1	13 ^E	7	9			
Paid help		ŀ	F	F	F			
Immediate family and others	1	ŀ	F	6 E	F			
Heavy chores								
Immediate family	45	64	64	62	64			
Friends, extended family	15	19	22	21	20			
Paid help	8	13	10	12	8 E			
Immediate family and others	4	4	4 ^E	5	7 ^E			
Moving around the house								
Immediate family	6	80	78	68	61			
Friends, extended family	1	F	F	17 ^E	14 ^E			
Paid help	1	F	F	F	11 E			
Immediate family and others	1	F	F	F	14 ^E			

[†] reference group

14380

^{*} statistically significant difference from reference group (mild disability) at p < 0.05 Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

The Daily Routine



Statistics Canada official release bulletin, every working day at 8:30 a.m. (Eastern time)





Is that right? You didn't read *The Daily*? Did you know that it's the best source of statistical information in the country?

Each working day,
The Daily provides economic and
social data that's available free of
charge on our Web site. Journalists
never miss it. Business leaders and
policy makers use it to make sound
decisions.

All new data from Statistics Canada must be officially announced in *The Daily*. So if you read it every day, you don't miss a thing!

The Daily delivers news directly from Statistics Canada—with easy-to-read news releases, informative tables and simple charts that clearly illustrate the news.



Subscribe to *The Daily*. It's FREE.

Visit www.statoan.go.ca to read
The Daily when you need it.
Or subscribe to the free online
delivery service and receive
The Daily automatically
by e-mail.

Add it to your dayto-day activities!

Canadian Social Trends

Unparalleled insight on Canadians

Subscribing to Canadian Social Trends means...

... Getting the scoop on topical social issues

What's happening today? Each issue of *Canadian Social Trends* explores the social realities that we are dealing with **now**.

... Being on the forefront of the emerging trends

Canadian Social Trends gives you the information you need to understand the key issues and trends that will influence tomorrow's decisions.

... Obtaining accurate, first-hand Canadian data

Rely on Statistics Canada's expert analysis for the latest and most comprehensive information on Canada and Canadians.

Canadian Social Trends offers you insights about Canadians that you can use to develop pertinent programs, must-have products and innovative services that meet the needs of 21st century Canadians.



Take advantage of this opportunity today!

Subscribe now by using any one of the following methods: Call toll-free 1-800-267-6677
Fax toll-free 1-877-287-4369

E-mail infostats@statcan.gc.ca

Canadian Social Trends is \$39/year for a print subscription. In Canada, please add either GST and applicable PST or HST. No shipping charges for delivery in Canada. Please add \$6 per issue for shipments to the U.S. or \$10 per issue for shipments to other countries. Visit our website at www.statcan.gc.ca for more information about the free online version of Canadian Social Trends.















